

Vol. II.

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES

October Term, 1942

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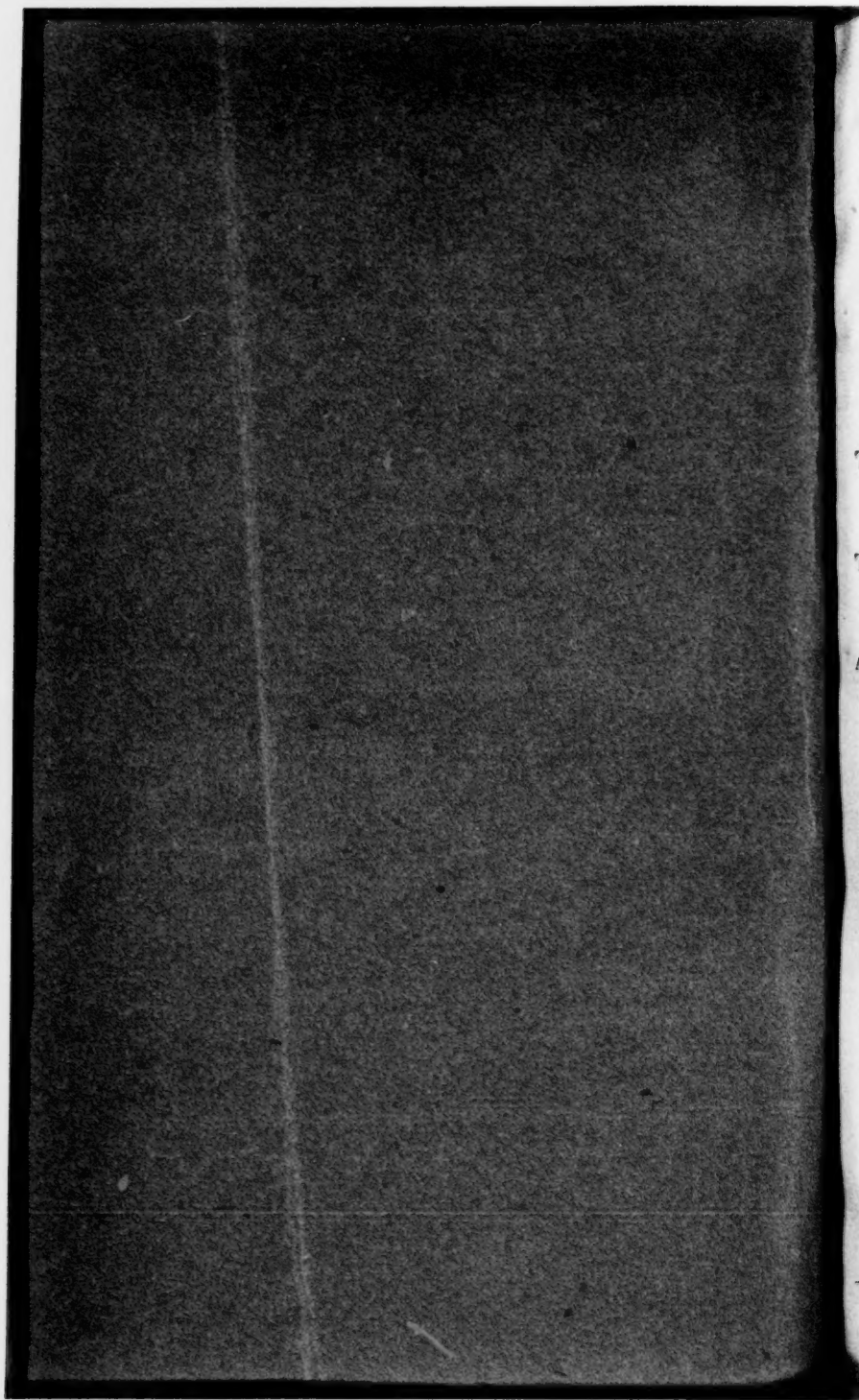
THE SAN JOAQUIN AND KINGS RIVER CANAL AND IRRIGATION COMPANY, INCORPORATED, APPELLANT,

vs.
THE COUNTY OF STANISLAUS, IN THE STATE OF CALIFORNIA, ET AL.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF CALIFORNIA.

FILED JULY 14, 1943.

(23,397)



(23,297)

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1300

MONDAY, *March 22, 1909*—10 a. m.

Counsel appearing:

For complainant, E. F. Treadwell, Esq.

For defendants, J. P. Langhorne, Esq.

Mr. TREADWELL: As part of the cross examination of Mr. Henderson I wish to read into the record the following testimony by Mr. Henderson given on cross examination in the case of Elizabeth Turner and the Las Animas & San Joaquin Land Co., Incorporated, against The Eastside Canal & Irrigation Co., in the Superior Court of Merced County, beginning at page 3411 of the transcript of testimony in that case. (Reading.)

Q. Well now, taking your knowledge of canals generally, Mr. Henderson, do you believe that a 25 per cent loss, take 25 per cent of the water put in, in 17 miles, do you know any other canal that has as much, a loss equal to that?

A. Yes sir, greater.

Q. Where is it?

A. At Stockton.

Q. What kind of land does it run through?

A. Sandy land.

Q. All the way?

A. Well, not all the way, no; it runs through both characters of soil, what is generally called gumbo soil, and the upper part, about six miles, I guess, runs through sandy soil.

Q. How much do you think the loss would be, taken as a whole, in the canals of the San Joaquin & Kings River Canal & Irrigation Company?

Mr. PECK: Well, that is a pretty broad question. We object to that unless he has made some measurement to determine, or calculation. It would be the barest guess. Do you mean including the outside canals?

Mr. E. F. TREADWELL:

Q. The whole system.

A. Each one carrying water at the same time?

Q. Yes.

A. Clear to what point?

Q. From one end to the other.

A. Well, that is a pretty broad question to ask. I don't believe I would want to give you an opinion on that now. I would rather look it up and give you an opinion based on some kind of calculation, not a guess.

Also beginning at page 3415 (Reading):

Q. You have got a fairly good head of water, then, but now can't you lay down any rule as to the per cent per mile that ought to be lost in a canal in good condition in running through land of that character, per mile?

A. Well, from the observation we made, it would probably run from one to one and a half to two per cent.

Q. Well now, don't you think, as a matter of fact, that one per cent a mile is a pretty good loss in a canal that is in good condition and has got a proper grade, and clean?

A. Well, of course, there are a number of canals that are in almost—some of them in the same class, practically the same class of ground that, if my memory serves me right, some measurements showed that they were pretty close to $2\frac{1}{2}$ per cent loss, in the same region, that is, in practically the same class of ground and same country.

Q. Well that may be, but I am asking you on this particular canal.

MR. PECK: I understand the last answer was about another canal. The WITNESS: Yes, I didn't apply it to this canal.

MR. E. F. TREADWELL: I say, suppose you have a canal, well built, what you consider a well-built canal, through land of this character, with proper grade, constructed on proper principles in every way, and properly maintained and cleaned, don't you believe that that is altogether too high a loss, $2\frac{1}{2}$ per cent a mile, and don't you think that about 1 per cent a mile would not be too little?

A. Well, the character of the soil, of course you somewhat compare the character of the soil conditions, as I told you. If the bottom of the canal reaches hardpan, my observation, actual observations, have been that the loss during sections of the canal where hardpan is at the bottom of the canal, or at least, the canal is cut to such a depth that it reaches the hardpan, that the loss, during those sections where the water can reach the contact between the two classes of earth, that the loss would be materially greater. As an example of that, in the Chowchilla, there were some sections where in the examination of that, it ran perhaps over two and one-half per cent, very close to three per cent to the mile.

1302 Examination-in-chief of CHARLES H. DASHER. Called for defendant; sworn.

By MR. LANGHORNE:

Q. 1. Where do you reside, Mr. Dasher?

A. Oakland, Alameda County.

Q. 2. What is your occupation?

A. Machine salesman for Henshaw Bulkley & Co.

Q. 3. Where is their place of business?

A. In the City and County of San Francisco.

Q. 4. How long have you been employed by them?

A. Approximately 7 years.

Q. 5. What business are they engaged in?

A. They sell all classes of machinery and I particularly sell contractors' machinery.

Q. 6. Do you sell contractors' machinery particularly with reference to excavating machines?

A. Yes sir; we sell the two makes of elevating graders, that made by the Washington Manufacturing Co. and the one made by the Western Wheeled Scraper Co.

Q. 7. Are those graders that you speak of suitable to be used for excavating canals?

A. Yes sir, they are.

Q. 8. Have you or your firm sold them for that purpose?

A. Yes sir.

Q. 9. And you know that they are used for that purpose?

A. Yes.

Q. 10. Now you say the Era excavator——

A. The New Era.

Q. 11. What is the name of the other one?

A. The other one is known as the Western Giant.

Q. 12. Is there another besides the New Era?

MR. TREADWELL: He didn't say he sold the New Era.

A. That one made by the Washington Manufacturing Co. is familiarly known as the New Era.

Q. 13. Then the Western Giant.

A. The other one made by the Western Wheeled Scraper Co. is the Western Giant.

1303 (By Mr. LANGHORNE:)

Q. 14. What are the capacities of those graders with reference to the amount of cubic yards of earth excavated per day?

MR. TREADWELL: We object to that question on the ground that it calls for an opinion of the witness. No proper foundation has been laid for it. It does not appear that the witness has ever used the graders or either one of them, or that he has any information of his own knowledge as to the amount that they will remove.

MR. LANGHORNE: I will withdraw the question for the present.

Q. 15. Have you seen the graders work?

A. I have, yes sir.

Q. 16. Do you know what their capacities are with regard to excavating earth?

A. I know that particularly, referring to the Western Giant, that it will handle——

Q. 17. Just answer the question.

MR. TREADWELL: Answer the question asked. He has not asked you what it will do. He wants to know what you know about it.

A. Yes, I have run the Western Giant grader.

(By Mr. LANGHORNE:)

Q. 18. What amount of cubic yards of earth per day will the Western Giant move?

MR. TREADWELL: I wish to cross examine the witness as to his information before that question is answered.

MR. LANGHORNE: I don't see why you should cross examine him. He said that he knew what they would remove, and what they would do.

THE MASTER: I think counsel desires to cross examine him to test

the information of the witness. He could do it later, of course, but it is often done in this way, and I will permit him to do so.

(By Mr. TREADWELL:)

Q. 19. You say you have seen the Western Grader used. Where have you seen it used, Mr. Dasher?

A. In Santa Clara County, right near Mayfield; at all events I believe it is in Santa Clara County.

1304 Q. 20. At what place?

A. It was on a tract of land that the Leland Improvement Company were improving.

Q. 21. Now it was being used, was it, in the laying out of the streets, I suppose?

A. It was particularly used in digging a ditch, but I did not use it for that purpose.

Q. 22. What were you doing there?

A. I was simply testing the traction engine that was pulling the machine.

Q. 23. And how long were you there?

A. I ran that machine two half-days.

Q. 24. And you were there testing the machine that was pulling and not the grader itself?

A. Well, I actually ran the grader itself so as to test the machine.

Q. 25. You actually ran it two half-days? Now what measurements did you make to find out how much earth was excavated at that time?

A. I roughly calculated it from the depth at which the plow was ploughing and the width we cut, that it was making an approximate rate of travel of the engine—my estimates were purely approximate estimates.

Q. 26. And outside of that, when have you ever operated one of the New Era excavators?

A. That was the only time that I ever actually operated a machine.

Q. 27. And the Western Giant, when did you operate that?

A. That was the machine I had reference to; not particularly the New Era machine. I never operated the New Era machine.

Q. 28. It was the Western Giant that you operated at Leland?

A. Yes.

Mr. TREADWELL: Now we object to the question, your Honor, on the ground that it calls for a conclusion of the witness in a matter as to which the witness does not appear to have any peculiar expert knowledge, but at most would only have the ability to testify as to what a particular dredger or a particular excavator did in a particular number of hours. He would have no ability to testify as to what

1305 could be done regularly by such an excavator counting the time it would take to oil and repair and fix the breaks in it, and things of that kind, in a long protracted piece of work.

Mr. LANGHORNE: Here is a witness who has been engaged in that business 7 or 8 years and his business is selling these machines, and to satisfy himself that they would do the work that they claimed

for them, he has made a study of them. He is also ready to testify that he has seen them in operation, and has actually operated some of them himself. It would be rather a remarkable proposition if he could be in business all this time and selling these machines and in constant observation of them and would not be qualified to testify in regard to them when he had been constantly observing whethert they would do the work claimed for them.

The MASTER: I will take the testimony.

(By Mr. LANGHORNE:)

Q. 29. How many cubic yards of earth a day will these machines move?

Mr. TREADWELL: We make the same objection.

A. They will move at least 1000 cubic yards per 10 hour day.

(By Mr. LANGHORNE:)

Q. 30. Is that the minimum or the maximum?

A. That is the minimum.

Q. 31. What sort of soil do they operate in?

A. In any sort of soil that a plow will turn a furrow in. It won't handle loose sand or it won't handle heavy rocks. Any sort of soil that a plow will plough in and turn a furrow in, the machine will handle the earth.

Q. 32. Now in soil which is composed mainly of loam, what is known as loam, and in some instances of adobe, about how many cubic yards per day would it move?

Mr. TREADWELL: We make the same objection.

A. They will handle at least 1000 cubic yards per 10 hour day.

Q. 33. Do they ever go over that?

A. Reports have been made to me that they have gone over 1300 that. I have never seen it tested in that way myself, but I have heard from those that I have sold the machine to, that they had gone considerably over it.

Mr. TREADWELL: I move to strike out the answer on the ground that it is hearsay.

Mr. LANGHORNE: I think the witness's testimony is competent in reference to machines that they have sold to persons that have made these reports.

Q. 34. Is that the only man that you can testify to that you ever heard say that?

A. It is.

Q. 35. What is the cost of these machines?

A. The New Era grader is \$1250 and the Western Giant is \$1750.

Q. 36. Do these machines excavate a canal, say, for irrigation, 55 feet wide and $7\frac{1}{2}$ or 8 feet from the bottom of the cut to the top of the bank?

Mr. TREADWELL: We object to that on the ground that the witness has not shown that he has any knowledge as to what they

would do. He has never excavated any such canal or seen it excavated by them; that it is simply the opinion of the witness on a subject as to which he is not competent to testify.

Mr. LANGHORNE: I submit that he has established his competency to testify, from his previous testimony.

The MASTER: I understand that counsel for complainant desires to have his objections of record?

Mr. TREADWELL: Yes sir.

The MASTER: I overrule the objection.

A. The Western Giant will excavate such a canal.

• (By Mr. LANGHORNE:)

Q. 37. I will ask you if these machines can be enlarged to excavate large works or canals

Mr. TREADWELL: I object to that question on the ground that it does not appear that the witness is an expert as to the construction or engineering features of these instruments, and that it does not appear that he has any ability to testify as to what could be done as to some machine which never has been manufactured, so far as the testimony of this witness shows.

Mr. LANGHORNE: I will withdraw that question.

Q. 38. I will ask you, Mr. Dasher, are you familiar with the construction of these machines

A. Yes sir.

Q. 39. Is more than one sized machine made?

A. Yes.

Q. 40. Now that machine that you have been talking about here, the New Era grading machine and the Great Western, has that any number or designation indicating its size or capacity?

A. Well, the principal difference between the two machines comes in the length of the elevator, and that is what gives the Western Giant its capacity to excavate a larger ditch than the New Era, because it has a longer elevator.

Q. 41. You say there are different sizes made? You have been testifying about a machine that costs \$1200?

A. And the Western Giant costs \$1750.

Q. 42. What is the other?

A. The New Era cost \$1250; with the shorter elevator.

Q. 43. Now then, if necessity arose could those machines or either of them be made of larger dimensions for the purpose of special work?

Mr. TREADWELL: We make the same objection, that the witness has no ability to testify as to what could be done.

A. I can qualify as a mechanical engineer, if you wish.

Q. 44. Are you a mechanical engineer?

A. Yes sir.

Q. 45. How long have you been a mechanical engineer?

A. Ever since I left college, in 1896.

Q. 46. What college was that

A. The University of California.

Q. 47. You graduated there as a mechanical engineer?

A. I took a course there in mechanical engineering. I did not graduate. I left in my senior year because of financial reasons.

Q. 48. You have practiced that profession, have you?

A. Yes sir; as a mechanical engineer and draughtsman and
1308 designing machinery.

Q. 49. Was the concern that you are with, handling these machines—have they sold many of them in California?

A. Within my knowledge in the last six years, 16 of them.

Q. 50. Do you know whether any of those machines sold by your firm are engaged in excavating canals?

A. I know of three that I personally sold that went for that purpose.

Q. 51. Do you know whether they were successful in their operations in digging canals?

Mr. TREADWELL: We object to that on the ground that it does not appear that the witness knows anything about it of his own knowledge other than he got from hearsay. It also calls for a conclusion as to what would be deemed a success.

A. I know that they were successful, two of them particularly.

(By Mr. LANGHORNE:)

Q. 52. Have you seen any canals or work of that nature done by any of these machines?

A. Well, I have seen the canals that the operator said had been excavated with that machine. I have not seen one of them actually excavating the canal.

Mr. TREADWELL: I move to strike that out as hearsay.

(By Mr. LANGHORNE:)

Q. 53. Was the machine sold to those parties for that purpose?

A. Yes sir.

Q. 54. And you afterwards saw what they said was the work done by the machine?

A. Yes sir.

Mr. LANGHORNE: Take the witness.

Cross-examination.

By Mr. TREADWELL:

X Q. 1. When did you leave the University of California? Mr. Dasher?

A. Early in the year 1906.

X Q. 2. And when did you go into the employ of Henshaw Bulkley & Co. as a salesman?

A. In 1900 and 1901.

X Q. 3. And you have been there in the capacity of salesman ever since that time?

A. Salesman and engineer, yes sir.

1309 X Q. 4. The land that you saw the excavator working on at Leland—at the proposed town of Leland, near Mayfield,

that was in Santa Clara County? What is the character of that soil?

A. It was a heavy adobe soil.

X Q. 5. It is land that had been cultivated and plowed and planted for a great many years, as far as you know?

A. Well, I was told that some of it had been and that some of it had not been.

X Q. 6. It mostly had the appearance of being cultivated land, did it not?

A. Yes.

X Q. 8. What was the length or the distance that you excavated at the time you were down there in the two half-days?

A. They laid off a section of field for us to work the machine in. It was approximately two miles long, and we ploughed down the two miles and ploughed back.

X Q. 9. How many times did you go up and down?

A. Oh, I should say we went down—well, five times down and five times back, possibly six.

X Q. 10. Now is that just your estimate of it? You have no record of it exactly how many times, but that is what you think it was?

A. That is what I think it was. There was no occasion of course, for my counting the number of times that I went down. A test was made to determine the power capacity of the engine, and we were loading the grader to the utmost capacity in order to put the load on the engine.

X Q. 11. You were trying to sell the engine, were you?

A. Why, we were trying to get our money for the engine from the Leland Improvement Co.

X Q. 12. The Leland Improvement Co. was claiming that the engine was not up to the represented capacity?

A. Was not powerful enough to do the work.

X Q. 13. So this was a sort of dress rehearsal, to make a show for the Leland Improvenient Co., of course?

A. Yes sir.

X. Q. 14. How deep were you excavating?

1310 A. At times we put the plow in 10 inches deep.

X Q. 15. What was the average?

A. About 8; 6 to 8; 8.

X Q. 16. What were you excavating for? A road?

A. Well, as I say, we were just excavating to test the machine. This was an open piece of ground.

X Q. 17. This was an open piece of ground and you went there to plough it up?

A. And deliver the material off of the end of the draper, off of the end of the elevator.

X Q. 18. Your idea in order to test the engine was simply to show that the engine was strong enough to pull the machine through the depth that such a machine should go?

A. These people were claiming that the engine was not powerful

enough to pull the grader when it was delivering 1000 yards per 10 hour day.

X Q. 19. And you were trying to show that the engine was strong enough?

A. Yes sir.

X Q. 20. How many hours did you run that excavator?

A. About 4 hours each day. No, I won't say that, either. About 4 hours the first day and about 2 hours the second.

X Q. 21. Now do you know the width that you excavated?

A. The plow was cutting about 12 inches wide. It varied from 11 to 12 inches.

X Q. 22. You did not make any record of the total width that you cut there?

A. No, just measured the furrows as the plow would cut along.

X Q. 23. And your recollection is that you went up and down 5 or 6 different times?

A. Yes sir.

X Q. 24. Now the length, how did you arrive at your length?

A. We took the diameter of the wheel of the engine, the big driving wheels of the engine. We got the circumference of the wheel and counted the number of revolutions that it made per minute. My recollection is that the engine was travelling about 4 miles per hour.

X Q. 25. Did you make a written report as to the amount 1311 that you excavated?

A. No, I did not.

X Q. 26. When was this?

A. It was early last year.

X Q. 27. That is, the early part of 1908 or 1907?

A. I think it was the latter part of 1907; just before the rains in 1907 commenced.

X Q. 28. What was the length of the arm of that excavator that you had down to Leland?

A. That we were operating; that that machine would carry?

X Q. 29. No, I am talking about the one that you had down there.

A. About 22 feet long.

X Q. 30. That is your recollection, is it?

A. Yes sir, we did not have all the elevator on.

X Q. 31. How much of an elevator were you using? What length? What length of elevator were you actually using?

A. As I say, about 22 feet.

X Q. 32. You said, as I understand it, that you did not have to put on—

A. We did not have the whole 30 feet that the machine would carry on.

X Q. 33. What is the longest elevator that you ever sold?

A. We sold one, 30 feet.

X Q. 34. Whom did you sell that to?

A. Well, this one at Leland was sold with a 30 foot elevator, and we sold one across down here in Alameda County, to some town site down there. I have forgotten who they were, that had a 30

foot elevator on. I know that this one had a 30 foot elevator on, because I set it up in the yard and measured it. I have sold two others to a contractor, that had two 30-foot elevators on.

X Q. 35. Did you ever see that operating, at 30 feet?

A. I never saw one of them operating with 30 feet on.

X Q. 36. The prices that you give, are those the only priced excavators you have, or are there different prices? Are there larger ones than those?

A. No, we have smaller ones than those. Those are the largest.

X Q. 37. You say that you sold three of them for canals, 1312 and that you afterwards saw the canals. Now what canals were they?

A. No, you misunderstood me. I said I sold these for canals, but I didn't say I saw those canals.

X Q. 38. You didn't mean that you sold an excavator for a particular canal, and that afterwards you saw that particular canal and was told that the excavator did the work?

A. No.

X Q. 39. So all you know about the excavator doing the work on either of the canals that you say you saw, was what people told you?

A. Yes.

X Q. 40. Now where were those canals, and what was the size of them that you did see?

A. Well, the canal that I saw was approximately 14 or 15 feet across the top, and 10 or 12 feet across the bottom, and it was over my head, because I walked down in the bottom of it.

X Q. 41. What difference do you make between the New Era excavator and the Western Giant? Which will do the most work?

A. Well, I make the same capacity claim for both of them.

X Q. 42. What do you guarantee when you sell those?

A. We are always willing to give a written guarantee for 1000 cubic yards for a 10 hour day.

X Q. 43. And the two of them are the same?

A. Yes sir.

X Q. 44. What accounts for the difference in price?

A. The Western machine on account of its longer elevator has to be constructed considerably heavier.

X Q. 45. What is the longest elevator that you ever sold of the New Era?

A. 22 feet.

X Q. 46. And in order to take a longer elevator you have got to have a heavier machine?

A. Also it must be more strongly constructed; a heavier construction.

X Q. 47. Now when you say that one of your excavators will move 1000 cubic yards in 10 hours, you mean running continuously for 10 hours, they will produce that result?

A. Yes sir.

X Q. 48. Have you got any of these Western Giant excavators with the 30-foot elevator in stock here in San Francisco?

1313 A. No, not at present.

X Q. 49. Do you know where there is one in San Francisco?

A. I don't think there are any in San Francisco.

X Q. 50. When did you last see one with a 30-foot elevator?

A. In 1907. When I set this one up in our yard before we sent it out.

X Q. 51. What became of the one that you sent to Leland?

A. I believe it is still down there. I was told so the other day.

X Q. 52. They never completed that job down there, did they, laying out those streets?

A. I understand not.

X Q. 52. They went bankrupt, didn't they?

Mr. LANGHORNE: We object to that as immaterial.

A. I believe so.

(By Mr. TREADWELL:)

X Q. 54. Don't you remember the name of the party that you sold the 30-foot elevator to for the Alameda town site?

A. No, I can't just recollect what that man's name was. The town site is down here near Newark. I could very quickly find out, though.

X Q. 55. Russell, was the name—Russell City?

A. Yes, Russell City.

X Q. 56. Is Russell City simply on the map or have they really excavated the town there?

A. As to that I could not say. I have been there on the train and I saw some streets.

X Q. 57. Do you say that you have been selling both of these, both the New Era and the Western Giant?

A. Yes sir.

X Q. 58. Is there anyone else in San Francisco who sells them?

A. No sir.

1314 Redirect examination.

By Mr. LANGHORNE:

R. D. Q. 1. How would this excavator be used in digging a canal say that is to be wider than the length of the excavator or draper? Suppose you needed to dig a 60-foot canal and you had this Great Western excavator with a 30-foot elevator, how would it be used, operated?

A. The elevator could be lengthened and the machine counter-balanced, or you could go over the ground, some of it, twice.

R. D. Q. 2. What do you mean by going over it twice?

A. By cutting the ditch a little wider than is necessary and moving the earth off to one side and then going back into the ditch and filling up the cut that you have made with some dirt from the middle.

R. D. Q. 3. Can that machine be operated to make a wide ditch

by driving up one side and delivering the earth on, say, the right hand side, and then driving down the other side and delivering the soil on the right-hand side?

A. Well, the soil on the right-hand side of that machine turned around.

R. D. Q. 4. Yes.

A. Yes.

R. D. Q. 5. That would build a wide ditch, would it not, and make banks?

A. That would build a wide ditch.

R. D. Q. 6. And with a 30-foot elevator it would build a ditch 60 feet wide?

A. Well, approximately 60 feet wide.

Recross-examination.

By Mr. TREADWELL:

R. X Q. 1. You spoke about a counter-balance. Have you ever seen a counter-balance used on one of these excavators?

A. No.

R. X Q. 2. The general idea in building machinery, as you understand it, is to build it so that it will produce the very maximum of results, and the elevator, as you understand it, is built in proportion to the strength of the machine?

1315 A. Well, I don't understand just what you want to get at. The machine of course, is constructed counter-balanced, the weight; take a 30-foot elevator machine, a machine built of such a width that it will counter-balance it with an elevator built 30 feet long.

R. X Q. 3. If you have a shorter elevator you can have a lighter machine?

A. You can operate with a lighter machine.

R. X Q. 4. It is the fact that y-ur smaller machines can be built lighter? The smaller your machine the lighter is your elevator?

A. Yes.

R. X Q. 5. And you have your elevator so that it will do as much work as the machine will reasonably stand?

A. Yes.

R. X Q. 6. Now if you counter-balance that with a further weight and then extend the elevator, that puts of course naturally a greater strain upon that machine, does it not?

A. Yes.

R. X Q. 7. And you have never done that so as to know whether one of these machines constructed in the way you have it, whether it would stand that extra strain or not?

A. No, I have never actually done that.

R. X Q. 8. So that when you say that it has been done, that is just simply your opinion that it could be done?

A. My engineering opinion from my knowledge of machinery. They are certainly built strong enough, massive enough.

R. X Q. 9. That is your idea?

A. I would say that is my opinion.

(At the hour of 11:45 A. M. recess was had until 2 P. M.; when proceedings were resumed as follows:)

1316 Testimony of H. H. HENDERSON, recalled for defendant.

By Mr. LANGHORNE:

Q. 1. Mr. Henderson, in your report, Exhibit R, where you state that the excavation of China slough is 8268 yards and you afterwards stated on your examination that that was an error, and that the aggregate amount of yardage was 42,724 cubic yards, I will ask you whether that is in one bank or both banks of the slough?

A. I figured for each bank, that quantity for each bank.

Q. 2. That quantity for each bank should be included?

A. That quantity for each bank should be included, yes.

Q. 3. So those were the total amounts in the China slough in the distance you have given in your report—the total amount would be double 42,724 cubic yards? Is that correct?

A. That is correct.

(By Mr. TREADWELL:)

Q. 4. In other words, then, Mr. Henderson, instead of the yardage in the distance you measured on China slough being 8268 cubic yards it was something in the neighborhood of 85,000 cubic yards?

A. Yes sir, a little over 85000.

Q. 5. In other words, in all probability, looking back at your report and refreshing your memory on the whole matter, the probabilities are that in putting down 8268 cubic yards you simply lost a point, and by that made 82,680 cubic yards? Is not that likely the way the error happened?

A. I don't really know how it happened, but I know there should be about that difference.

Q. 6. At any rate, I am trying to get you to some method of accounting for this large discrepancy.

A. I think the discrepancy was simply in the writing. I don't think there was any error in the calculation.

(By Mr. LANGHORNE:)

Q. 7. Now then, I would like you to state to the court in
1317 what condition you found the two banks that you refer to, on that part of China slough, at the time you made your examination?

A. Well, of course I have testified to that in the examination here, and I think I stated that I found places that the bank had been eroded away, that the way it was done was by the water in 1906, a part of it in 1906 and in 1907. In some instances the dirt was washed into the field. The dirt that was on the right bank was evidently washed into the field, or a good part of it, and it re-entered the canal on the left bank, probably some of it entered the canal. But inasmuch as it was high water, it was in my opinion carried, part of it passed right down the canal, and it did not go into the canal,

and so I didn't make any deduction for that part of it which had been eroded away, as I did not consider that the water in the canal—that is, the water used in irrigation, ever came against the dump.

Q. 8. Well, there was another point. You did not consider that the banks were necessary to carry the water that would be naturally carried in the canal?

A. Not that part of the canal that had been washed away.

Q. 9. Which part of it was it that you found mostly washed away?

A. I have a record of it all the way through, of both banks; a little more, perhaps, on the left bank than on the right.

Q. 10. Proportionately how much would you say was washed away along China slough?

A. Well, I could not give you the exact percentage. I have no record of it.

Q. 11. In a rough way?

A. Oh, I think there must have been 1/10 or 1/12; something like that.

Q. 12. That largely was simply washed out into the field where you could not trace it or measure it?

A. That was my judgment.

Q. 13. How did you get at it? You had to make cross sections of China slough in order to make your calculation. You attempted to build one from the portions of the bank which still remained?

A. Yes, I took portions where the high water had not affected it.

1318 Examination-in-chief of ALBERT B. SOUTHARD. Called for defendant; sworn.

By Mr. LANGHORNE:

Q. 1. Where do you live, Mr. Southard?

A. 277 Edgewood Avenue, San Francisco.

Q. 2. What is your business or profession?

A. Civil engineer and contractor.

Q. 3. How long have you been in that business?

A. I have been an engineer practically for 27 years, and a contractor for about 7.

Q. 4. Engaged how long in California in that business?

A. All the time with the exception of 3 years.

Q. 5. Do you have an office in this City?

A. Yes sir. 422 Crocker building.

Q. 6. In the exercise of your profession and business as an engineer and contractor have you ever had anything to do with excavating or moving earthwork in this state?

A. Yes sir.

Q. 7. Have you had anything to do with excavating and moving earthwork in connection with ditches or canals?

A. Yes sir.

Q. 8. Have you ever in connection with that work had occasion to use or observe the use of machinery in the manner of such excavation?

A. Yes sir, on one particular job.

Q. 9. What kind of excavating machinery was that?

A. The New Era grader.

Q. 10. You say you have used machinery on one job? That was a New Era, was it?

A. That was a New Era, yes sir.

Q. 11. What sort of work was that?

A. We were running some lateral ditches, cutting a ditch for levee work and throwing up a levee.

Q. 12. Whereabouts was that work done?

A. That was about 10 miles out of Colusa.

Q. 13. In this state?

A. In this state, yes sir, about 10 miles out of Colusa, 1319 along the Sacramento river.

Q. 14. At what time in the month?

A. June, July and August, 1905.

Q. 15. What was the character of the soil in which the excavator was working?

A. The class of soil which I had there was called a sort of valley loam; it was a mixture of loamy soil, I think, which ploughs up very readily and does not clod.

Q. 16. About how many cubic yards a day did you move with the excavator, of earth?

A. I moved for a month there on an average from 12 to 15 hundred yards a day.

Q. 17. What was the cost per cubic yard of doing that work with the excavator?

A. It ran from 3 to 5 cents. I could not give the exact figures, but it was about that; between 3 and 5 cents.

Q. 18. Do you know the character, the general character of the soil on the west side of the San Joaquin river in the counties of Stanislaus, Merced and Fresno?

A. Some places I have seen it, and I know some of it.

Q. 19. How would you classify that soil?

A. Well, that valley, parts of it, some has sand and some has the valley—what I call the valley loam; that is a mixture of adobe and sand; not adobe enough to stiffen it up, but somewhat similar the same, almost.

Q. 20. Was that character of soil on the west side of the San Joaquin river any more difficult to move than that you excavated in Colusa County?

A. Not in the places where I have seen, no, unless you get into the adobe. There you strike it harder. There is adobe in all parts of the valley, but just small stretches of it.

Q. 21. Do I understand you that adobe can be moved by an excavator?

A. The first ploughing, that is, in the summer time, the first ploughing it will clod and I never was able to handle clods. After the first ploughing the soil then breaks up better, and will carry over the draper very nicely.

1320 Q. 22. So wherever there was adobe in the soil the first ploughing would dispose of that, would it?

A. The first ploughing would dispose of that, but it would have to be handled with a scraper.

Q. 23. After that you could use an excavator on it?

A. You could use the New Era for that.

Q. 24. Now that was the extent of your personal experience with the New Era excavator? Did you ever do any work digging ditches and making embankments with an excavator other than those you have mentioned?

A. In San Diego; I can give a little experience, not personal experience there. That might be hearsay.

Q. 26. Places I mean where you know an excavator has been used.

A. I know it was used there, but I didn't have charge of the work.

Q. 27. What was the character of the work?

A. The character of the work was heavier than in what I call this valley loam. There was some gravel in it, but not very much gravel in it. As I stated a little while ago, if there was any lumps or fine stuff to catch it—the large chunks will not travel over the draper, or in case we got large stones. We were running through the Otay, near San Diego. We had two New Era graders there and they told me—

Q. 28. What were they building or constructing?

A. They were building a ditch for a wooden pipe, a water pipe.

Q. 29. Do you know of any other earth excavation where the excavators were used?

A. Down at Leland I saw them quite a number of times, working at Mountain View. The excavators were working there, and they were grading the streets and digging the ditch, and everything, with the New Era graders there. That was last year.

Q. 30. Did you ever see the excavator called the Great Western in operation?

A. Not in operation. I know the machine but I have never seen it in actual operation.

1321 Q. 31. Have you ever examined the machine?

A. Yes, but I have never seen it in operation.

Mr. TREADWELL: Not the Great Western, the Western Giant.

Mr. LANGHORNE: The Western Giant.

Q. 32. In your opinion is that an effective machine?

A. I have not seen it in operation. I stated that I had simply seen the machine and examined the machine in building. I would not be qualified to state what the machine would be able to do on work from simply looking at it. I would not like to state because it would be nothing but a guess. The other I state that I know what it will do.

Q. 33. When you said that it would move a certain number of yards a day, how many days' work was it worked? How many hours a day, I mean?

A. Ten hours a day was a day's work.

Mr. LANGHORNE: Take the witness.

Cross-examination.

By Mr. TREADWELL:

X Q. 1. Mr. Southard, you have the contract, did you not, for doing the grading at the Catholic School near Mountain View?

A. Yes sir.

X Q. 2. What was the contract price of that work?

A. 20 cents a yard.

X Q. 3. How many people bid on the work to do the excavating for the Catholic school at Mountain View?

A. Eight, I think.

X Q. 4. Can you remember the names of the different contractors that bid on that job?

A. There was O'Day of San Francisco, the O'Day Contracting Co., Quimby & Harrilson, C. A. Warren & Co.—I don't just recollect them now, Mr. Treadwell.

X Q. 5. But practically all of the large excavators around San Francisco bid on that job?

A. Yes sir, quite a number of them.

X Q. 6. What was the magnitude of that job?

A. About 100,000 yards, 110,000 yards, I think it was.

X Q. 7. It was put up for public bidding, was it, for any-
1322 body that wished to bid on the job?

A. It was not advertised. It was just told around amongst the contractors.

Q. Just told around?

A. Just told around.

X Q. 9. That bids were desired on the work?

A. Yes sir.

X Q. 10. And your bid was the lowest bid, was it?

A. Yes.

X Q. 11. At 20 cents a cubic yard?

A. At 20 cents a cubic yard. Well, let me correct myself, if you will. The bid was not by the yard. It was lumped, but that was what it amounted to per yard. It was a lump sum that we bid on it.

X Q. 12. Now where is that located?

A. It is about 3 miles west of Mountain View, just about.

X Q. 13. In the vicinity of the new railroad that goes through there?

A. The new railroad that goes from Capistrano to Mayfield goes right along in front of it.

X Q. 14. The land surrounding that is in orchards, is it not?

A. Yes sir.

X Q. 15. The same character of land, is it, that is excavated?

A. Some of it, yes.

X Q. 16. And what has that particular land been used for, if you know, prior to the building of the college?

A. About four acres or five acres of it was in grapes. The balance of it was in grain.

X Q. 17. It had all been planted either to grain or to grapes?

A. Cultivated, yes sir.

X Q. 18. It had been cultivated in some way?

A. Yes sir.

X Q. 19. What was the deepest excavation that you did on that work?

A. 11 feet.

X Q. 20. And that tapered off to nothing?

A. Tapered to nothing.

X Q. 21. It was rolling, hilly ground, was it?

A. Some of it rolling ground. It was on two knolls, just the top of two knolls.

X Q. 22. You simply took off the top of the knolls and brought the earth out so as to make it uniform for the college?

1323 A. A uniform grade, yes sir.

X Q. 23. Now about how wide and how long was the space that the entire excavation covered?

A. 1800 by 600.

X Q. 24. When did you get the contract for that work, Mr. Southard.

A. I think it was a year ago last May or June, something like that.

X Q. 25. That is, it would be about May or June, 1907?

A. 1907, yes sir.

X Q. 26. And when did you start to work?

A. I started in July. I think it was July that I started.

X Q. 27. Now outside of that contract what contract have you had for excavation in the last three years?

A. In large quantity?

X Q. 28. Yes.

A. Nothing in large quantity in the last three years; smaller buildings and things of that kind.

X Q. 29. All small?

A. Yes sir.

X Q. 30. Did you have any building excavations in San Francisco?

A. No, I have had no building excavation in San Francisco.

X Q. 31. Anything that you did have was in small quantity?

A. In small quantity in different parts of the country.

X Q. 32. Now you stated that you did some work near Colusa. Was that on a ranch?

A. Yes sir.

X Q. 33. What place was it on?

A. Why, it was part of the Crocker estate, adjoining the Crocker estate, Colonel Moulton's ranch, about 10 miles out of Colusa.

X Q. 34. And was there any irrigation system there of canals before you went there?

A. Yes sir.

X Q. 35. And you were simply building the lateral ditches to connect with those canals, do I understand?

A. No. They were for drainage purposes.

X Q. 36. Explain what you mean by drainage purposes? What was the object of the ditch?

1324 A. Well, the idea of the levee work which we were going to use was to protect a particular piece of property, as they had had trouble on the river frequently with regard to the main levee and they could not agree with the people. They had trouble about keeping up the levee, so they decided to run the levee around their own property.

X Q. 37. How far was this from the river?

A. The levee started at the river and went around the property. It was necessary to run drains, and so on, to take the water from low places off and to drain it into the river at different places.

X Q. 38. The land was then subject to overflow, then, from the river?

A. It always has been, yes sir.

X Q. 39. And how big a levee did you throw up there?

A. The levee was—let me see. Oh, it was about 200 feet at the base, where we started, and 20 feet on the top. I think that is the dimensions of it, 20 feet on top and 200 feet at the base where we started. I have forgotten the cross section of that levee. We cleared our space out for 200 feet. That is what it was. We cleared a space for 200 feet; I have forgotten the exact dimensions.

X Q. 40. What do you mean by clearing a space? Of willows?

A. Yes; where we started out of the river, willows and trees.

X Q. 41. You cleared a space 200 feet wide in order to operate?

A. Yes.

X Q. 42. Then you threw earth up and excavated; excavated and threw earth up. What was the base of your levee?

A. Well, I don't like to guess at it, and I don't remember just what the figure was.

X Q. 43. Do you think it was 20 feet on top?

A. Yes sir, about 20 feet on top, where we started from the main river. I didn't stay through the whole work. While I was doing the engineering work for it all, I only finished one part of it and another contractor finished the balance of the work.

X Q. 44. Did you have a contract to do that work?

1325 A. I had a percentage agreement with the Crocker estate people.

X Q. 45. You did not have any contract then, to do it for a certain amount of money?

A. No sir; I had a percentage agreement.

X Q. 46. That is, a percentage on cost?

A. A percentage on cost.

X Q. 47. You didn't finish the contract?

A. I didn't finish the contract.

X Q. 48. And what did you do? Turn it over to somebody else? Or how did you happen to get out of it?

A. They didn't want or would not sign an agreement with me, would not put it in writing. They wanted me to work without having any writing, and I would not do it, and it was turned over to the other foreman to arrange a contract and he agreed with A. E. Buckman.

X Q. 49. To do the entire job?

A. To finish the job, yes sir.

X Q. 50. Do you know what his contract called for?

A. He told me that it called for 9 cents; that he had put it in for 9 cents, and he got 10 per cent.

X Q. 51. When did you go to work on that job?

A. I think it was in the month of June. I know I worked part of June, July and August.

X Q. 52. When did you begin actual excavating?

A. The new part, some time in July.

X Q. 53. And how long did you work yourself?

A. About 3 months.

X Q. 54. And was that when you left it to the other man, to Buckman?

A. Yes sir.

X Q. 55. And how much of the job had you done when you left there?

A. We fixed up a mile of the river levee and had cut the trench for about a mile of the new levee and cut some of the ditches. Then I had run the surveys around the whole line.

X Q. 56. How far from where you cut with the excavator did you deposit the earth?

A. We cut a ditch about 16 feet wide and three feet deep, running down the center of the levee, and throwed it out, then I threw that dirt back in again.

X Q. 57. Back into where you had taken it out from?

A. Yes.

X Q. 58. What was the object of that?

A. They claimed that the dirt or the water would work along the surface of the ground. If new dirt was laid along the top of the ground, the water would find its way, and by cutting this key—they called it a key—we broke that point so that the water would not find an easy way to get through the bank.

X Q. 59. And how long an elevator did you have on your excavator?

A. Twenty-two feet. I could throw from my plow outside of the draper 22 feet.

X Q. 60. Now, did you have a settlement with the Crocker people when you got through with your work?

A. Yes sir.

X Q. 61. And did you get a percentage on the expense of the work?

A. Yes sir.

X Q. 62. Who measured the work that had been done?

A. Mr. Martin, I think, was their engineer; Mr. Martin of the Crocker estate.

X Q. 63. You think that he did, but you are not sure, whether he measured it or not?

A. Yes sir; I was going to say this, that the amount paid me was not according to the amount of yardage put in the work, because a great part of the work was the cleaning of the old levee for about a mile of the river front, filling up and building up the face of the

old levee and digging out stumps, and things of that kind, which would not show in regard to a yardage proposition. That is what I was going to say.

X Q. 64. That is what I wanted.

A. What I mean was, that it was not based on the yardage of the excavation.

X Q. 65. Your charge and payment was not based on yardage?

A. No sir.

X Q. 66. Now did you measure the excavation that you had done?

A. I did at the time. My field books and notes will show that but I could not tell what it is.

1327 X Q. 67. Well, what occasion did you have for measuring it?

A. For the purpose of knowing what work I was doing.

X Q. 68. To whom did the excavator belong that you had on the job?

A. We had two excavators. They belonged to the Crocker estate.

X Q. 69. Do you know what they cost, Mr. Southard?

A. \$1250 I think was the price; either \$1200 or \$1250.

X Q. 70. And where did you get your horses for the work?

A. We bought them.

X Q. 71. They were your own horses, were they?

A. They were Crocker estate horses. They bought them. They bought them for the job.

X Q. 72. You had nothing to do with getting horses belonging to the Crocker people?

A. They sent a man to buy them and I took charge of them here and took them up there and took them to camp, and everything.

X Q. 73. And the feed for the horses, where was that procured?

A. That was bought in the valley. I bought it wherever I could.

X Q. 74. And the blacksmithing, was any of that done?

A. Yes, we carried our own camp equipment, cook, and blacksmith and everything.

X Q. 75. You carried your own camp equipment?

A. Yes sir.

X Q. 76. What occasion did you have to figure up the cost of that work per yard?

A. Well, I never do any class of work without knowing exactly what it costs me a yard. I suppose that is a part of my inherent training. I am always interested if I see a machine, or anything of that kind working, to see what it is costing the men to handle the work. In this particular case I was interested to know for their benefit, as well as for my own.

X Q. 77. What did you allow for the excavators?

A. In regard to what?

X Q. 78. In fixing the cost of the work?

A. In fixing the cost of the work? Well, I took the cost of
1328 my teams—

X Q. 79. I am asking about the excavator now.

A. \$1250.

X Q. 80. Yes.

A. I allowed 10 per cent depreciation on it.

X Q. 81. 10 per cent for how long?

A. 10 per cent on the month. 10 per cent a month on that.

X Q. 82. You had three of them?

A. I had two.

X Q. 83. Did you take 30 per cent?

A. 20 per cent a month on \$1250.

X Q. 84. You allowed 10 per cent a month on each excavator?

A. I allowed 10 per cent a month on each excavator, for wear and tear and bolts, and those kind of things, which wear out rapidly on an excavator. It costs quite a little.

X Q. 85. What did you allow for horses?

A. A dollar a day.

X Q. 86. A dollar a day per horse?

A. Yes.

X Q. 87. Did you figure any profit in that, or was that the actual cost?

A. The actual cost.

X Q. 88. Well now have you got the figures on that place, Mr. Southard?

A. No sir, I left them in the Crocker building before the fire. They went through the fire.

X Q. 89. You say it cost from 3 to 5 cents? You can't remember which it was?

A. No, it varied. I did not get it down. I did in places. I simply had a memorandum of the work in the way I carried on the job, and it ran from 3 to 5 cents. That is the only way you can estimate it, as based on the number of feet.

X Q. 90. Now how much of the earth that the New Era grader loosens does not carry over the elevator?

A. That depends a good deal on how high you are carrying it up. If you can keep it down enough you can take the most of it over. If you set your plow up high enough—it depends a great deal on the line, the slope of the draper. It depends on the position of the draper. If you get it up too high a great deal of it rolls off. If you can keep it down to a fair height it carries almost all the plow will turn over.

1329 X Q. 91. And that depends also somewhat on the character of the earth, does it not, a great deal?

A. Yes sir.

X Q. 92. In sandy, loose earth you can hardly handle it at all?

A. Sand, I can't handle it.

X Q. 93. You cannot handle sand?

A. No sir.

X Q. 94. And the nearer it approaches the sandy soil the more difficulty you have in handling the earth with the excavator?

A. Yes sir.

X Q. 95. Now, the portion that does remain in the trench, how do you remove that?

A. Well, you simply keep running it over and pounding it down.

That is, the next time the elevator goes over it it will pound it down and make it so that the next time you plow, it will come up with the other and you will pick it up again.

X Q. 96. And is that cheaper than taking that loose part out with the scraper?

A. Yes sir.

X Q. 97. Now this work in San Diego, that was down there near the tide land, was it not?

A. Yes sir; along right around back 20 miles inland, in the Otay; up to the dams up there, that they have. It was at the reservoirs that they were fixing outside of the town of San Diego.

X Q. 98. You had nothing to do with that work as I understand it?

A. No sir. I was building some railroads down there at the time. I bunked with the Spreckles people and I could get access to the cost of what they were doing.

X Q. 99. You recognize the difference, do you, Mr. Southard, between the Western Giant excavator and the New Era excavator?

A. Not as far as the work goes, no sir.

X Q. 100. You have never seen the Western Giant work?

A. No.

X Q. 101. I mean, when you see the machines do you know the difference?

A. In appearance?

X Q. 102. Yes sir.

A. I know they are different in appearance.

X Q. 103. Is there a marked difference in appearance?

1330 A. No, there is no great difference in appearance. I would have to see what the name was to tell it was the Great Western.

X Q. 104. Is there any difference in the price of them?

A. Well, there is a little difference. I think the Great Western is a little more expensive. It was at that time. I know I looked at both of them.

X Q. 105. It was those new machines that you used on the Crocker place?

A. Yes sir.

X Q. 106. And the excavator that you saw at Leland, was that a new excavator or an old one?

A. I could not say that, sir. I saw it simply working a number of times, pulled by a traction engine. I could not say whether it was a new machine or an old one. Yes, I will say that I saw them putting it together.

X Q. 107. It was a new machine, then?

A. It was a new machine.

X Q. 108. Which one was it, did you say? A New Era or a Western Giant?

A. A New Era.

X Q. 109. Are you sure of that?

A. No, I will not say that positively, because I did not go right over to see it. Those machines are not distinct enough so you can

tell from where I was. But I will say it was a New Era machine, that is all.

X Q. 110. Who had the contract to do that work at Leland?

A. I don't know, sir.

X Q. 111. You don't know who was operating it there?

A. I don't know who was operating it.

X Q. 112. Did they let the contract for that work, or advertise it for proposals?

A. Not to my knowledge. I understood, I heard that they were doing the work themselves when I was working at Mountain View I used to go by a good deal. That is the way I happened to see the work.

X Q. 113. Have you bid on any other excavating work in large quantities during the last three years, Mr. Southard?

A. Not excavating alone, no sir.

X Q. 114. Have you bid on any railroad work in California?

A. Yes.

1331 X Q. 115. What railroad work have you bid on?

A. Well, I have done quite a good deal on railroads. I have not bid on any railroads lately at all.

X Q. 116. What railroad work have you done, Mr. Southard?

A. Well, I have done railways of San Diego, and I worked on street railways in San Francisco from the starting of the change of horse cars here, to seven years ago, and that was built, with the exception of the Omnibus Railway and the Union Street line, under my supervision.

X Q. 117. As I understand it, at that time you were in the employ of the company?

A. Yes. I was their engineer at the time.

X Q. 118. You were their engineer?

A. Yes, but the San Diego road was done under contract. That was a different proposition.

X Q. 118. That is, you were acting as contractor?

A. Yes sir, I was the contracting engineer at that time.

X Q. 120. What do you mean by the San Diego road? What railroad is that?

A. That is the Coronado lines and the lines running from different parts at San Diego.

X Q. 121. Electric lines?

A. Electric lines, yes sir.

X Q. 122. What was the amount of your contract per cubic yard on that work on the San Diego railroad?

A. I took it at so much a running foot on ditch work. That was not figured by the yard. It was figured at so much a running foot for ditch-work. That is the way we got that class of work. That is the way we figured on it.

X Q. 123. But however you figured on it, what did it cost?

A. What did it run into per yard?

X Q. 124. Yes.

A. It would run into about 30 cents.

X Q 125. And this railroad in San Francisco, how was that work done? Was it let out by contracts?

A. The company did its own work.

X Q. 126. You stated in regard to this levee at Colusa that 1332 you don't remember now the exact width of it at the bottom.

A. No, I have forgotten the cross section of the levee.

X Q. 127. But it was a very considerable levee?

A. Yes, it held the Sacramento river; that is, one bank of the Sacramento river.

X Q. 128. Well, now your excavator had a capacity of 22 feet from the place where the earth was ploughed?

A. Yes sir.

X Q. 129. And if you did that on the two sides of the levee that would enable you to cover a distance of 44 feet in the extreme?

A. Yes.

X Q. 130. So your levee was not bigger than that, was it?

A. Yes.

X Q. 131. How did you cover the other space?

A. With scrapers. After digging the ditch and starting in the center we worked harrows. We had to run teams on the levee to work the dirt down. They would not stand for the dirt coming in loose. They had to have it tramped down in some way. So I worked harrow teams, scraper teams, working into the center so it was over 50 feet. I know the base was over 50 feet, but I don't know exactly what it was.

X Q. 132. So you say, Mr. Southard, that they would not stand for the earth coming in loose, as it dropped from the excavator? You mean that the people that you were working for would not be satisfied with it in that condition?

A. That they would not be, and I as an engineer, would not consider it good work to put it in that way.

X Q. 133. In other words, it would not be strong enough, dropping that way, to hold the pressure of the water?

A. No sir, it would not. In fact, it did not stand the pressure of the water, even with the teams that we put on it. The water went through it, even as it was.

X Q. 134. What is the difference in that regard between the work done with an excavator and the work done with a scraper as you say? What effect does the scraper work have?

1333 A. Well, it has the advantage of tamping it in by pressure of the horses and the scraper dragging over the dirt, and that causes a settlement before the water has an opportunity to work through. Otherwise, the water takes it out very quickly. But where the scraper goes over it with four horses, dragging the scraper, why that has a tendency to beat the dirt down solid.

X Q. 135. Now do you remember, Mr. Southard, more accurately, how you measured the amount of excavation in that work?

A. Through the amount of ground cut during the day.

X Q. 136. That is, you took cross sections of the excavation after you had made it?

A. We had levels there 50 feet long along the ditch and then

they would go over it after the week's work and see how much material had been taken out during that time. We simply cross sectioned it.

X Q. 137. Now in making your estimate of the expense, did you include anything else than the things that I have mentioned, that is, the depreciation of the excavator, the rent of the horses and the labor, the feed, the blacksmithing, the repairing? Was anything else included?

A. The full camp account and everything was chargeable against the amount of material handled, nothing foreign to it.

X Q. 138. That did not include, for instance, the expense of the scraper work that you were doing?

A. Yes sir, everything.

X Q. 139. That included the scraper work also?

A. That included the total expense of the manufacture for the camp. The total expense of the month for the camp went against the amount of material handled.

X Q. 140. Well, what did you allow on scrapers?

A. What did I allow on scrapers? The price of the team, the four horses, the wagon and the scraper itself.

X Q. 141. Where did you get the scraper from?

A. Took it up there.

X Q. 142. What did you allow on that?

A. Two-bits a day.

1334 X Q. 143. You didn't in fact, rent the scrapers? They belonged to the ranch?

A. No, they belonged to the company. They belonged to the ranch. To arrive at the cost I would make the usual allowance as if I was running them.

X Q. 144. Do I understand you then, that the 3 to 5 cents did or did not include the expense of the scraper as well as the excavating?

A. It included the expense of the scraper that helped the excavator; not when we were building with the scrapers alone, but we used a couple of scrapers along with the machine when it was necessary.

Redirect examination.

By Mr. LANGHORNE:

R. D. Q. 1. Mr. Southard, in regard to this work that you did at the Catholic School, was that done with the excavator?

A. No.

R. D. Q. 2. What was that done with?

A. That was done with a Fresno, a four-horse Fresno.

R. D. Q. 3. Is that more or less expensive work than digging a canal?

A. It took 8 or 10 horses to plough the ground down there at the college, and I ploughed the ground in the canal with two.

R. D. Q. 4. Then it was more expensive, was it?

A. Yes sir, much more expensive.

R. D. Q. 5. Then this bid of yours for this contract price of 20 cents included your profit, did it?

A. Yes, it was supposed to, yes.

R. D. Q. 6. Now this San Diego railroad that you were working on, did you use an excavator there?

A. No sir; that was in the middle of the town, and simply one track, and keeping the cars going on the other.

R. D. Q. 7. And was that more or less expensive, considering the conditions, than digging a canal with the excavator?

A. More expensive, on account of other features. There was no opportunity to work.

1335 R. D. Q. 8. You state that this levee that you built on the Sacramento river with the excavator, that the water got through. Were the waters of the Sacramento river against the bank of that levee?

A. Yes sir.

R. D. Q. 9. State whether or not in your opinion that was greater or less pressure than would be observed by the waters of a canal say 50 feet wide from bank to bank?

A. Well, the Sacramento at that point is 400 or 500 feet wide, I should say it was without any question.

R. D. Q. 10. Now I ask you whether or not in your opinion as an engineer an effective canal for irrigation purposes could not be constructed on the west side of the San Joaquin river, on the west side of the County, through the Counties of Merced and Stanislaus, 50 feet wide and 7 from the bottom of the cut to the top of the bank, using for the purpose of construction the New Era excavator which was spoken of?

A. If it would be practicable to build it with a New Era grader?

R. D. Q. 12. Yes.

A. Yes sir, I would think so.

R. D. Q. 13. Now then, I will ask you whether or not it would be possible to allow water into the canal gradually, so that the banks would settle properly, so that the water would be held effectively in a canal constructed by the New Era grader?

A. I think it would be covered a great deal better than it could under the conditions we have been talking of in the Sacramento river, rising so high and with such a tremendous force to it, with the loamy soil which would aid very materially in holding it, which would be proven by the first rain that came. In these canals that we built down there, as far as I seen them, I didn't see any reason why the New Era would not build as good a canal as any scraper would build. If I had to build them I would rather build them with the New Era and I could do it for just about half the money.

1336 R. D. Q. Then *Then* your opinion is that an irrigation canal would be built in that section for about half the money that it would take to build it with a scraper?

A. I said that you could, with the proper kind of soil, build a canal for half the money with the New Era as you could with a scraper.

Recross-examination.

By Mr. TREADWELL:

R. X Q. 1. You spoke about the width of the San Joaquin river at that point.

A. Yes sir.

R. X Q. 2. Does that affect the pressure on the bank in any way?

A. No, merely the body of the water. I spoke of the width to represent the body of the water that fills the place up between the two banks during the winter.

R. X Q. 3. Of course, the width of it would have nothing to do with the amount of pressure on the bank?

A. No, it would have nothing to do; simply to show the great body of water that was in there, flowing down between the banks, when the banks should give way.

R. X Q. 4. And if you have a canal 100 feet wide and you fill it up, half way up to the top of the bank with water, the pressure on the banks is not any greater than if the canal were 50 feet wide, is it?

A. No, if it has got an opportunity to flow. Those canals, as a usual thing, the water is in the solid part of the ground. The part that has been dug out is usually above the water line; most of it at any rate.

R. X Q. 5. Have you ever done any work in building canals in Fresno County?

A. No sir.

R. X Q. 6. Have you ever built any canals in Merced County?

A. No sir.

R. X Q. 7. Did you ever build any canals in Stanislaus County?

A. No sir.

R. X Q. 8. Do you know the canals known as the canals of the San Joaquin & Kings River Canal & Irrigation Co. in this case?

1337 A. I don't know one from the other, no sir. I was down in through the Merced country down there, and Turlock district, and I went over some of the canals and over some of the work that was being done for some gentleman here in the city, and those are the only ones that I never examined to amount to anything.

R. X Q. 9. Turlock is in Stanislaus County, is it not?

A. I can't say, I am sure. I think it is, though.

R. X Q. 10. What is the character of the earth through that district?

— There is a good deal of sand in that district.

R. X Q. 11. And that could not be handled by the excavator at all?

A. There are certain parts of it that can be handled by an excavator. Over the work that I visited there was some of it that you could not handle with an excavator. I went there with the idea of making up an estimate for building a canal and doing the work.

R. X Q. 12. You did not do any work there? You didn't get it?

A. No sir.

R. X Q. 13. Were they asking for bids on the work?

A. I was asked to come there as an engineer and see what I would agree to take hold of the property, some 15,000 acres or something like that, and lay out an irrigating system for them. They had one there that they were not satisfied with.

R. X Q. 14. What particular land was that?

A. That Stevinson colony, I believe. Do you know it? I could not tell you exactly where it is.

R. X Q. 15. Then you are acquainted with Mr. Henderson?

A. Simply an introduction yesterday.

R. X Q. 16. And who took you down on the Stevinson property?

A. I was asked to go down by a gentleman who married one of the Stevinson girls.

R. X Q. 17. Hogan?

A. Yes sir, Mr. Hogan, that's the gentleman. He asked me to go down and look at it.

1338 R. X Q. 18. That is a son-in-law, as you understand it, of Colonel Stevinson?

A. That is what I understood.

R. X Q. 19. And when was that?

A. Here a few months ago this last year; something within the last year.

R. X Q. 20. Was it just over the colony that this work was to be let out—what is called Stevinson colony?

A. No, he wanted to make it general. He said his system that he had was extensive, but he wanted to carry it so as to make it over the whole property.

R. X Q. 21. That is, the whole property between the San Joaquin and the Merced rivers?

A. Yes sir.

R. X Q. 22. That did not include taking the water down to the Patterson ranch across the river?

A. That was not included, no sir. That was not spoken of at the time.

R. X Q. 23. He wanted you to lay out new ditches and levees and things of that kind?

A. He said they could not get water to their claims that they were selling, and they wanted somebody to show them how to get it there.

R. X Q. 24. Yes, there was a good deal of land that they had there, that they could not get the water over?

A. That is right.

R. X Q. 25. And that is where they had sold the lots?

A. That is as I understand it.

R. X Q. 26. That is a sandy country, too, is it not?

A. It was that day. I struck it on a sandy day.

R. X Q. 27. It was a good deal the same as the Turlock country?

A. Yes sir.

R. X Q. 28. And you would not care to do much work with the New Era excavator in there, I imagine?

A. No.

R. X Q. 29. That is, not in that portion of the country?

A. Not in that portion. I did not see any chance for it.

R. X Q. 30. Did you make an estimate at that time as to what you would be willing to lay canals out for, in there?

A. I made him a proposition, yes sir. Not an estimate of the yardage, though.

1339 R. X Q. 31. What was the basis of your estimate? I am not getting at the amount, but what did you base it on?

A. The proposition that I made was that I would take charge of the work as an engineer and lay him out a system, build a system, superintend the building of it, for a certain figure.

R. X Q. 32. Were you to do the construction?

A. Yes sir.

R. X Q. 33. And did you tell him what the plans of it were?

A. Only to a certain extent.

R. X Q. 34. So it could not be reduced to anything definite here so that we would know how much you estimated the yardage for the work?

A. No sir; that is, I could not say how many feet. He was not willing to pay for that information. I had paid my own fare down there, and I would not give it to him.

R. X Q. 35. He was not willing to pay you what you wanted for the work?

A. That is it, yes sir.

R. X Q. 36. Did you meet Mr. Peck down there when you went there?

A. That is, the superintendent over the hotel?

R. X Q. 37. No, the lawyer.

A. The superintendent over the hotel, he is the one that seemed to be in a manner superintending everything else.

R. X Q. 38. That is, Mr. McCullough?

A. Yes, I guess that is the man.

R. X Q. 39. Did you ever meet Mr. Peck down in the Crocker building—the attorney?

A. No, I never met him. I had enough with the two I met.

R. X Q. 40. Did they tell you that they were dissatisfied with their present engineer down there, and wanted to get a better one?

A. Why, they said that they could not get any results, that is all.

Mr. LANGHORNE: That is our case in chief.

Mr. TREADWELL: I had expected to call Mr. Fortiere as a witness but he has left California and gone to Washington and will not be back until June, and as I thought it probable that we could close our case without taking his deposition, I asked Mr. Lang-
1340 horne if he would consent to allow me to offer his affidavit which is on file herein, and used on the application for temporary injunction, with the same force and effect as if the witness were here. And as I understand it, Mr. Langhorne is willing that I should use that affidavit with the same effect as if the witness were here, but subject to such objections as he now wishes to urge to it, and with that understanding I offer the affidavit of Samuel Fortiere which is now on file.

Mr. LANGHORNE: Defendant objects to the affidavit and the mat-

ters therein set forth that appear therein after the words "to irrigate more than 100,000 acres" and in the paragraph headed "Total area of land which can be irrigated under the San Joaquin & Kings River Canal & Irrigation Co.'s system" on the ground that the matters appearing in said affidavit after said words "to irrigate more than 100,000 acres," and each of such matters are and is irrelevant to the issues in this case.

The MASTER: The objection is overruled.

Mr. LANGHORNE: Defendant excepts.

(Further hearing adjourned to Tuesday, March 23, 1909, at 10 A. M.)

1341

TUESDAY, March 23, 1909—a. m.

Counsel appearing:

For complainant, E. F. Treadwell, Esq.

For defendants, J. P. Langhorne, Esq.

Examination-in-chief of J. F. CLYNE, Called on behalf of complainant in rebuttal; sworn.

By Mr. TREADWELL:

Q. 1. Where do you reside, Mr. Clyne?

A. Los Banos.

Q. 2. How long have you lived there?

A. Nearly four years.

Q. 3. Are you in the employ of the San Joaquin & Kings River Canal & Irrigation Co., Incorporated?

A. I am.

Q. 4. When did you first enter the employ of that company?

A. In June 27, 1905.

Q. 5. What position in that company do you hold at the present time?

A. Superintendent.

Q. 6. When did you become superintendent?

A. November 1, 1906.

Q. 7. Prior to becoming superintendent what was the nature of your employment?

A. Assistant superintendent.

Q. 8. Since you have been the superintendent of the canal, Mr. Clyne, have you annually made an inventory of the personal property on hand at the end of the fiscal year, that is, November 15, of each year?

A. Yes sir, I have.

Q. 9. I show you a document headed "Inventory of S. J. & K. R. C. & I. Co., Incorporated, November 15, 1907," and marked here as "Complainant's Exhibit No. 17 for Identification." I will ask you if you prepared that inventory?

A. Yes, I prepared the original from which this was copied.

Q. 10. And does that state the personal property which the company had on hand at the date mentioned there?

A. Yes, it does.

Q. 11. Have you had charge of the purchases, of obtaining the materials which are mentioned in that inventory?

A. Yes, most of them.

Q. 12. Are you familiar with the prices at which those materials can be obtained, and at which they were obtained by the company?

A. Yes sir.

Q. 13. Are you familiar with the prices which you have to pay for equipment in connection with the automobiles?

A. I am.

Q. 14. And the automobile you handle yourself, do you, and the repair of it?

A. Yes sir.

Q. 15. Is that true also of the equipment for the telephone?

A. Yes.

Q. 16. And are you also familiar with the prices that you pay for the office furniture, and things of that kind?

A. Yes, I know the cost of that.

Q. 17. And are you familiar with the prices that you have to pay for horse feed?

A. Yes sir.

Q. 18. That is true generally, is it, Mr. Clyne, of all the things set forth?

A. Yes.

Q. 19. You are buying and selling things all the time?

A. Buying nearly all the time, yes.

Q. 20. Now I will ask you if the values which you have put on this personal property were the values at the 15th of November, 1907, of the property mentioned therein?

MR. LANGHORNE: We object on the ground that it is incompetent, on the ground that it has not been shown that the witness knows the value of any of the articles mentioned in that inventory.

THE MASTER: I overrule the objection.

MR. LANGHORNE: We take an exception.

(By Mr. TREADWELL:)

Q. 21. You may answer the question.

(Question read.)

A. Yes, they are.

Q. 22. Will you state, Mr. Clyne, whether or not any of the country which is covered by the complainant's canals was
1343 overflowed in the year- 1906 or 1907, and whether or not any of the banks of the canals were overflowed in those years?

A. Yes. The country within 5 or 6 miles below the headgate of the canal was flooded during the winter of 1906 and 1907.

Q. 23. For what distance?

A. For about 5 or 6 miles below the headgate, along the canal right of way, and also along China slough. That water came overland from the river, and struck the banks from the outside, that is, from the upper side.

Q. 24. That is, you mean that it was overflowed from the head a distance of 5 or 6 miles?

A. Down.

Q. 25. What effect did that have on the banks, Mr. Clyne?

A. Why, it washed them out in many places.

Q. 26. Since you have been in the employ of the complainant has there been any work done in the way of removing the deposit of silt from the canals of the complainant?

A. Yes.

Q. 27. And on what parts of the canals, beginning at the head, has that work been done?

A. The main canal, about 5 or 6 miles below the headgate, was dredged during that time.

Q. 28. You mean, from the head down to 5 or 6 miles?

A. No.

Q. 29. You mean beginning at that point?

A. At that time, during the time I was there the dredging was done within the 5th and 6th mile from the headgate, approximately at that point; and the cleaning of the canal below was done with excavators and scrapers between Camp 13—that would be about the 25th mile—to a point about opposite the town of Newman.

Q. 30. That would be below San Luis Creek?

A. Quite a distance.

Q. 31. And that cleaning that you have referred to was between the head of the canal and the Los Banos creek?

A. No, not all of it. Considerable of it was below the Los Banos creek.

Q. 32. Well now, what part did you do above Los Banos creek?

A. The main canal as distinguished from the parallel, from the Los Banos creek, to the Charleston Dairy.

1344 Q. 33. Where is that located?

A. That is about 3 miles—about the 28th mile of the canal.

Q. 34. Three miles above Los Banos creek?

A. And from the Charleston dairy to Camp 13 we partially cleaned the main canal.

Q. 35. That is one of the parallel canals?

A. Yes, the outer of the two.

Q. 36. Now, what else, going from towards the head?

A. Well, above that point we did only small cleaning, taking out occasional lodgements, and removing tulies.

Q. 37. And then the work that you refer to down to the 5th and 6th mile?

A. That was done by the dredgers.

Q. 38. Was the cleaning you have referred to all in one of the parallel canals, or were they both cleaned?

A. For a short distance above the Los Banos creek there is but one canal and we cleaned that, and above that point we cleaned what is known as the main canal or the outer of the two parallel canals.

Q. 39. In regard to the surface of the ground, Mr. Clyne, above these canals, does the situation of the canal cause any change to be made in the natural surface of the ground?

A. Yes, above the outside bank the silt that will be carried down by the creeks from the foothills would settle outside of the outer

bank and raise what would seem to be the natural level of the ground.

Q. 40. So that a person, after that is ploughed up and sowed, going through, would mistake that for the natural surface of the ground?

Mr. LANGHORNE: We object to that as leading and purely argumentative.

(By Mr. TREADWELL:)

Q. 41. I will withdraw it. At any rate, as I understand your testimony, Mr. Clyne, the surface of the ground on the upper side of the canal bank is raised up above the original natural surface, 1345 by the deposit of this matter which is brought down from the foothills?

A. That is correct.

Q. 42. And if that surface were figured as the natural surface of the ground for determining the amount of excavation below the natural surface of the ground, an erroneous result would be reached?

A. Yes.

Q. 43. What is the purpose, Mr. Clyne, of the surveying and mapping that the canal company does?

A. It is to keep account of the changes in the fields and of the new land that is prepared for irrigation under the canal system.

Q. 44. You keep then, as I understand it, maps which are the result of the surveys, showing the land that is irrigated with water from the canal company?

A. Yes.

Q. 45. While you have been connected with the company what has been the practice, Mr. Clyne, in regard to reporting to the San Francisco office any new work or betterments, done on the canal as distinct from ordinary repairs and maintenance?

A. Separate accounts, betterment accounts for each piece of work are kept in the ledger, and passed on through the ordinary channels of bookkeeping to the City office.

Q. 46. And you keep a set of books, do you, at Los Banos?

A. Yes sir.

Q. 47. And you there have separate accounts for betterments and for maintenance?

A. Yes.

Q. 48. You have that separately?

A. Yes.

Q. 49. And you report to the San Francisco office in connection with that, in accordance with those books?

A. Yes.

Mr. TREADWELL: In connection with the testimony of this witness we offer in evidence the inventory which has already been marked "Exhibit 17 for Identification."

Mr. LANGHORNE: We object to that on the ground that it is incompetent, also on the ground that it cannot be ascertained therefrom whether the inventory as stated on the 1st page \$8930.84, or the amount stated on the last page, \$1519.60, is correct.

1346 The MASTER: The objection is overruled.
Mr. LANGHORNE: We except.

(The paper is here marked "Complainant's Exhibit No. 17.")

Cross-examination.

By Mr. LANGHORNE:

X Q. 1. In regard to the telephone expense, Mr. Clyne, on the page marked "1" that purports to be a statement, does it not, of the amount of wire, brackets, hose and other things mentioned that were on hand on the date of this inventory?

A. Aside from the quantity contained in the lines.

X Q. 2. Do you mean that these articles mentioned in this inventory were stored and not used in the lines?

A. They were kept on hand to make repairs and extensions.

X Q. 3. That is what this means, then? It does not cover the wires and apparatus and appliances that were in use?

A. Well, it does not cover the wire that was in use nor the poles that were in use, nor the brackets nor the insulators, but it does include the telephones that were in use.

X Q. 4. You have got here 12 standard phones, 8 old phones. Those were phones in use?

A. Some were in use and some were held as extras.

X Q. 5. This inventory is not a complete inventory of the entire telephone line on November 15, 1907?

A. No, it is an account only of such things connected with the telephone line as might vary in quantity.

X Q. 6. Were these telephones, standard phones you have mentioned here, or any of them, purchased by the complainant before you became superintendent or assistant superintendent?

A. I think they were, some of them.

X Q. 7. And you did not purchase them?

A. It is possible that I did not purchase all of them.

X Q. 8. Are you an electrician?

A. Only in an amateur way.

X Q. 9. When a telephone is needed, you purchase it, do
1347 you, for the company?

A. Yes.

X Q. 10. Do you know anything more then, about a telephone, than the price that you have to pay for it?

A. Yes.

X Q. 11. What?

A. I know the parts of which it is made up, the principal parts. I can repair any ordinary defects in it.

X Q. 12. Do you know the battery of the telephone after it has been in use for a year?

A. I know what it costs and can figure the depreciation.

X Q. 13. What is this cost you have given here, of these 12 standard telephones intended to be?

A. The actual cost.

X Q. 14. Without any deduction for depreciation?

Mr. TREADWELL: Do you mean on those?

Mr. LANGHORNE: On those particular phones.

A. Those standard phones?

X Q. 15. Yes.

A. No.

X Q. 16. How long have they been in use?

A. Some of them have been in use a very short time; some not at all. I could not say exactly how long they have been in use. They are comparatively new phones.

X Q. 17. You stated a while ago that some of those telephones might have been owned by the company before you became superintendent?

A. Yes.

X Q. 18. Did you make any deduction for depreciation on that account?

A. Not on any telephone that is not over 4 years old, and had proper usage as those had.

X Q. 19. Then your idea is that a telephone that is 4 years old that has had proper usage has not depreciated?

A. Not materially.

X Q. 20. This auto? "One auto, \$600." When was that purchased?

A. Purchased about May, I think, 1907; somewhere about that time.

X Q. 21. What did it cost?

A. I think it cost us \$775.

X Q. 22. Does that include the tires, and so on, and other things?

A. No, not the extra tires that are mentioned there.

1348 X Q. 23. Were you ever in the automobile business?

A. No sir.

X Q. 24. Do you know anything about the value of the automobiles outside of the purchase price of them?

A. I don't know the cost of manufacturing them. I know the style, the prices of them, and to a certain extent the discounts allowed.

X Q. 25. And that is all you know, is it not, as to the value?

A. Yes.

X Q. 26. What kind of an automobile was this?

A. It was a Ford.

X Q. 27. Of what year, what vintage?

A. 1907.

X Q. 28. How long had it been in use? You say it was bought in May, 1907?

A. About May.

X Q. 29. And this inventory was made up in November. Had it been used to any extent?

A. Yes, it had been in use a part of that time.

X Q. 30. It had been used every day, had it not?

A. No.

X Q. 31. Nearly every day?

A. Why, at times it would be used every day in the week, and at other times it would not be used for several days. I was the only one who used it.

X Q. 32. And the extra tires, does that represent the purchase price of these tires?

A. If they were new, yes.

X Q. 33. Well, you have put them down here at \$45, two extra tires.

A. They were new then. That represents the cost.

X Q. 34. They had not been used; had they?

A. No.

X Q. 35. Now, this office furniture, the safe. Did you buy the safe?

A. No sir.

X Q. 36. Were you ever engaged in selling safes?

A. No.

X Q. 37. Why did you put it at \$20?

A. Because I considered that to be the value of it.

X Q. 38. And the transit, did you buy the transit?

A. No.

X Q. 39. How long had it been in use?

A. The company have had it for a long time. It had not been used all the time that they had had it.

X Q. 40. How long had they had it?

A. I could not say when they bought it. They bought it before my time.

1349 X Q. 41. What made you think it was worth \$50?

A. Why, judging from the cost of a new transit I think it was worth about that.

X Q. 42. It was an arbitrary figure, was it not, \$50, that you put down?

A. No, not entirely.

X Q. 43. What kind of a transit was it Whose make?

A. I cannot say now.

X Q. 44. You can't say how old it was?

A. Only approximately.

X Q. 45. Are you accustomed to use a transit yourself?

A. No.

X Q. 46. Do you know whether it was in good condition at that time?

A. I know that it was being used at about that time.

X Q. 47. Had you ever been engaged in the buying or selling of transits?

A. No.

X Q. 48. As a business?

A. No.

X Q. 49. The same way with regard to levels, had you bought those?

A. No.

X Q. 50. They were there when you went there?

A. I believe they were.

X Q. 51. Do you know what make they were, by whom they were made?

A. No, I can't say now.

X Q. 52. Do you know how long they had been in use?

A. Only judging from their appearance.

X Q. 53. And you put those down at \$100 for the two of them?

A. For the two.

X Q. 54. And the rain gauges, rod, current meters, steel tape, stop watch and ammeter, those are surveying instruments, are they not, most of them?

A. Most of them are, yes sir.

X Q. 55. Did you buy any of those yourself?

A. I am not sure that I bought the particular ones mentioned there.

X Q. 56. You found them there when you went there, I suppose?

A. Some of them were there when I went there.

X Q. 57. Were you ever engaged in the business of buying or selling surveyor's instruments or engineer's instruments?

A. No sir.

1350 X Q. 58. You have got down here "Lumber and piles" on page 2, 14,889 feet at \$35 a thousand, I suppose you mean \$626.12; assorted R. W. Did you buy that lumber?

A. I ordered it.

X Q. 59. From whom?

A. Mostly from the lumber yard.

X Q. 60. Where?

A. At Los Banos and at Dos Palos.

X Q. 61. The lumber yard at Los Banos?

A. The lumber yards at Los Banos and Dos Palos.

X Q. 62. What are the names of the lumber yards?

A. They both belong to Miller & Lux.

X Q. 63. They both belong to Miller & Lux?

A. Yes.

X Q. 64. When did you buy them?

A. At various times.

X Q. 65. Between what dates?

A. I could not say.

X Q. 66. Well, this is made the 15th of November, 1907. How long before that was this lumber bought? Between what times?

A. Why, it probably is not over 2 or 3 years old. It was bought within 2 or 3 years previous to that time.

X Q. 67. Was it on storage by the Canal Company?

A. No, it was lumber that was bought and distributed about the sections to be on hand in case repairs were necessary.

X Q. 68. And it had not been used in a structure, in any structure?

A. Not where it is put down as new lumber.

X Q. 69. I ask you if any of this particular item, any portion of that, had been utilized in any structure on the canal?

A. No, that is new lumber.

X Q. 70. Where was that lumber at the time you made the inventory?

A. At various section houses along the canal.

X Q. 71. Did you buy that all at one time from Miller & Lux?

A. No sir.

X Q. 72. Did you buy it all from Miller & Lux?

A. I would not be sure that we did. It is possible we did not.

X Q. 73. Well, from what other party or concern did you buy, if you did not buy from Miller & Lux?

A. We might have bought direct from lumber firms in San Francisco or at other places, where large quantities of lumber were required. *

1351 X Q. 74. I am not asking you what you might have done. I am asking you what you did.

A. I can't identify that particular lot of lumber as having been bought from any particular party.

X Q. 75. But you think that you bought part of it from Miller & Lux?

A. Yes.

X Q. 76. Do you think you bought half of it from Miller & Lux—as much as that?

A. Probably, yes.

X Q. 77. More than half?

A. I cannot say positively.

X Q. 78. Did you keep an account of those purchases, Mr. Clyne,—of that lumber, for instance?

A. No, not of that particular lot of lumber, because it was made up of what was left over from big jobs, and it was small lots of lumber put in at various times to be there in case we should need it.

X Q. 79. Then if you did not keep account of it, how is it that you put it in here at \$35 a thousand?

A. Because that was the value at both points of that kind of lumber, at that time.

X Q. 80. That \$35 a thousand then, does not represent what it cost, but what you estimated was the value at the time of this inventory? Is that right?

A. Well, it was the value of it at the time the inventory was taken, and about the average cost.

X Q. 81. Now the wood, 32 cords of wood, \$3. From whom did you get that?

A. We cut that.

X Q. 82. Oh, you cut it yourselves?

A. Yes.

X Q. 83. From the property, on the property belonging to the Canal Company?

A. Yes.

X Q. 84. These next items, vehicles and harness on page 3. Were not most of these things on hand when you became assistant superintendent of the company?

A. Part of them were.

X Q. 85. Do you know what they cost? What was given for them?

A. Yes. All of them were bought within my time; no, some of them were bought before.

1352 X Q. 86. And these values that you have given here, are they the cost of those articles?

A. The cost less depreciation.

X Q. 87. Your inventory does not show, does not have any separate statement or estimate of depreciation, has it?

A. No.

X Q. 88. And it does not show the original cost, no separate statement of it?

A. No, not in any article in use and appreciated.*

X Q. 89. Now then, I understand that in regard *that in regard* to whatever work or materials that went into Betterments or construction, that a separate ledger account was kept by you and sent to the office in San Francisco?

A. Yes.

X Q. 90. For instance, in regard to the dredge, you kept a separate account of that, did you not, as between that class of dredging which was cleaning the canal and that class of dredging which was new construction?

A. No.

X Q. 91. Why didn't you?

A. We kept simply an account of the total cost of the dredging.

X Q. 92. Of the total cost of the dredging?

A. That is, the cost from month to month of doing the dredging.

X Q. 93. And there was no distinction made then, in your accounts, as to whether that dredging was for new construction or whether it was simply cleaning the silt out of the old canal?

A. We reported to the city office the cost of doing the dredging and did not apportion the cost between the old and the new.

X Q. 94. Then you did not keep a separate ledger account of what work went into the new construction?

A. Well, I made that statement having in view new construction, new structures that were put in and new extensions that were being made in the canal, but not with reference to work which was partly new work and partly old.

X Q. 95. Well now, for instance, if you extended a gate so as to make a measuring gate out of it, you make no distinction or did not keep a separate account of that portion which was practically 1353 a new gate, did you?

A. Where we extended an old gate?

X Q. 96. Yes.

A. In that case we kept a measuring box account, an account entitled "Measuring Boxes." And the cost of the extension was put to that account.

X Q. 97. Was put to that account? So there was a separate ledger account kept then, showing the new construction of the measuring boxes?

A. Showing the extensions of the old boxes, the new extensions of the old boxes.

X Q. 98. And was that sent to the San Francisco office?

A. The items which went to make it up; that is, the journal entries and the cash book entries were copies of that, were — to the San Francisco office.

X Q. 99. Now you say that the silt brought down by the creek would deposit earth against the outside bank and raise it so that

in your opinion it would be difficult to determine what was the original bank of the canal at that point? Is that what I understand you?

A. No, that was not the statement.

X Q. 100. What was it?

A. The statement was that the creek and the natural flow of the rainwater, the surface water, would raise the natural surface or the former natural level of the country at the point where it met the outer bank of the canal.

X Q. 101. Are you a surveyor?

A. No sir.

X Q. 102. Did you ever measure the extent to which the land had been raised, as you have stated?

A. Take an actual measurement of it, with an instrument?

X Q. 103. Yes.

A. No sir.

X Q. 104. Did you ever measure it without an instrument?

A. I measured it with the eye, yes.

X Q. 105. How many creeks have you reference to, and what are they?

A. The one that I recall now as having deposited the most earth in that manner, was the Pinoche creek.

X Q. 106. Where is that?

A. The overflow from it touches the canal bank about 6 1354 miles below the headgate.

X Q. 107. When did you first observe it?

A. The overflow or the condition of the land?

X Q. 108. The condition of the land.

A. Why, when I first went to work for the Canal Company, about—something like 3 years and a half ago, I should say.

X Q. 109. And you took a measure with your eye at that time?

A. I noticed the difference of the ground.

X Q. 110. Then there was an overflow after that, was there not?

A. Yes.

X Q. 111. Was not that silt brought down there by that overflow?

A. Yes.

X Q. 112. Now that is about all there is to that, is it not, that the banks were washed out by the overflow?

A. The banks were washed out?

X Q. 113. I mean that the soil was brought in there by the overflow at that particular point?

A. No, that is the natural tendency.

X Q. 114. You have only been there, I believe, about 3 years, is it not, Mr. Clyne?

A. I have been there since the 27th of June, 1905. It is nearly four years.

X Q. 115. And this one place that you have mentioned, you say there was an overflow in 1906 and 1907?

A. That one.

Mr. TREADWELL: What one place?

Mr. LANGHORNE: Pinoche.

A. That particular point I think the silt was brought down in large quantities in 1903 and '7 and deposited against the bank. That was the most noticeable point where the level of the country outside of the outside bank of the canal, had been raised.

X Q. 116. Did it wash away the bank at that point?

A. No.

X Q. 117. Then the banks that were washed away in that freshet that you have spoken of were between that point and the head of the canal?

A. Yes.

X Q. 118. Now what other creek on the canal has deposited silt against the upper bank of the canal?

A. Why, all of the creeks that reach the canal do that at times, and it is not confined to creeks alone. The natural drainage will cause a rise in the ground outside of the outer banks of the canal, and that is particularly so on the outer banks of the main canal, because of the irrigation between there and the outside canal.

X Q. 119. So then, this drainage or washing that you have spoken of, would have a tendency to raise the outer bank of the canal?

A. Not the bank, but the country adjoining the outer bank, outside of the outer bank.

X Q. 120. That is your impression?

A. That is what I have seen.

X Q. 121. Measuring with the eye during the time you have been there?

A. Yes.

X Q. 122. Can you say to what extent any amount of soil has been deposited?

A. No, it varies with the conditions and place.

X Q. 123. And to what extent on each side of the creek has that been true??

A. You mean the distance from the creek?

X Q. 124. Yes.

A. Along the banks of the canal?

X Q. 125. Yes.

A. Why, in the case of the Pinoche Creek there is not any bank at the point where it touches the canal. It just simply spreads over the country.

X Q. 126. There are drainage ditches, are there not, along the upper bank of the canal?

A. Which canal?

X Q. 127. Well, on the main canal at points?

A. Yes.

X Q. 128. Is there not a drainage ditch on the main canal from the place where the outlet canal heads, on down the outlet canal?

A. The outlet canal?

X Q. 129. The outside canal.

A. Why, I can't place it.

X Q. 130. You know what a drainage ditch is, don't you?

A. You mean the ditch that takes the drain water above the canal?

X Q. 131. Yes. Where does that commence?

A. That is not a continuous ditch.

1356 X Q. 132. Well, where does it commence?

A. Oh, it commences at several points; wherever drainage is necessary.

X Q. 133. Well, a great deal of that drainage ditch is along the upper bank of the main canal, is it not?

A. Yes, it is excavated just outside the outer bank of the main canal; the upper bank of the main canal.

X Q. 134. Do you keep that in repair?

A. Yes. Not in thorough repair at all times, but we repair it to some extent.

X Q. 135. It is kept generally in good repair, is it not?

A. No, I can't say that it is.

X Q. 136. Why?

A. Well, I can't say why. It was before my time. Now we are endeavoring to keep it under good repair.

X Q. 137. Since it has been used it has been kept in good repair, has it?

A. No.

X Q. 138. The ditch has been for years more or less out of repair?

A. Yes.

X Q. 139. It has not been filled up, has it?

A. No, there are some places where it has been, but not through its length.

X Q. 140. As a general thing, that depression for this drainage ditch is there, is it not, and has been there since you have been there?

A. Well, at the points where the ditch was put in and intended to be used.

X Q. 141. Now on what points on the main canal is it, if you look at the map Exhibit 2, that there is no drainage ditch? Please look at that map and state, show the points where there is no drainage ditch. First take the main canal.

A. Well, I can't point out every depression here, but where it was intended to have a drainage ditch I can point out. On the parallel canal for a short distance below the Outlet Canal No. 2.

X Q. 142. You say for a short distance. Please state whether it was a mile or half a mile, or more, and about where it commences.

1357 A. It runs for perhaps $\frac{2}{3}$ of a mile, commencing at Outlet Canal No. 2 as marked on this map. Then below that point there is no regular drainage ditch maintained until we get down to Camp 13. From Camp 13 to Charleston Dairy about one-half the distance has a drainage ditch.

X Q. 143. How far is that? What length?

A. Oh, perhaps from 3 to $3\frac{1}{2}$ miles. Then from the Charleston Dairy to the Los Banos creek there is a drainage ditch, and below that point there is no regular drainage ditch maintained by the company, though for a short distance the water is drained along the outer bank of the main canal.

Mr. TREADWELL: That is all.

Redirect examination.

By Mr. TREADWELL:

R. D. Q. 1. Referring to this Exhibit 17, Mr. Clyne, what is the first page of that exhibit? What does that represent?

A. That is a summary or a recapitulation of the pages following.

R. D. Q. 2. Now in regard to the automobile which you got in May, 1907, did you make any improvements on that between that time and November 15, 1907?

A. Yes.

R. D. Q. 3. In regard to the dredge operating, as I understand you, there was some of the time the dredge was increasing the size of China slough, and some of the time it was removing silt? Is that correct?

A. I made no particular observation as to that point, but my belief is that that was the case.

R. D. Q. 4. Those are the two characters of the work, but you did not separate between maintenance and betterments?

A. Yes.

R. D. Q. 5. Now I will ask you if the dredger was doing any work of that nature, that is, any betterment work or widening of China slough, or any other part of the canals between the 1st of July, 1907, and the 30th of June, 1908?

A. No.

1358 *Testimony of W. C. Hammett, Recalled for Plaintiff in Rebuttal.*

By Mr. TREADWELL:

Q. 1. Mr. Hammett, have you heard the testimony of Mr. Henderson and also seen his report, Exhibit R, and the cross sections defendants' Exhibit 29, which has been introduced here?

A. I have.

Q. 2. Have you examined the calculations contained therein of the excavation of these canals?

A. I have.

Q. 3. Did you hear Mr. Henderson's testimony as to where he used the cut and where he used the banks?

A. Yes.

Q. 4. In determining the amount of the excavation?

A. Yes.

Q. 5. Have you prepared a calculation based upon the cross sections which Mr. Henderson has produced here, which shows the amount of excavation in those canals if you used the cut or depression as shown by those cross sections, and also a calculation showing the amount of excavation if you used the banks as shown by those cross sections, and also showing the amount of excavation if you used the banks in the places that Mr. Henderson stated he used them, and the cuts in the places where he stated he used them?

A. By implication it shows that last, but it does not show it directly. I have that based on the cross sections as shown with the

areas of cross sections as shown on Exhibit 29, but not with the areas—the areas were not separately calculated by me. They were taken from the ones indicated on the cross sections. And it shows only the amount of excavation that there would be, using the cross sections which are given on Exhibit 29-C, using the cuts only, and then using the banks plus 10 per cent only, for the different stretches as shown in the other exhibits.

Q. 6. Then to get this straight. In the first place, you based your calculations entirely upon the area of the cross sections as indicated by Mr. Henderson on these cross sections without determining whether that area was correctly stated there or not?

A. That is true.

Q. 7. Then you calculated the amount of excavation which will be shown by using the area of those cross sections as given by Mr. Henderson throughout these canals?

A. Yes.

Q. 8. And in the third place, you figured the amount of excavation which would be shown throughout the canal if you used the area of cross sections of the banks as furnished by Mr. Henderson, allowing 10 per cent for shrinkage?

A. Yes.

Q. 9. Then you made a table showing the result of those calculations?

A. I have.

Q. 10. Will you produce it? (The witness produces.) Have you also indicated in your same work the amount of excavation on the same canals as shown by the report of Mr. R. H. Goodwin, Exhibit 1?

A. Yes.

Q. 11. Referring now to the paper you produced, and headed "comparative table of earthwork calculations of the S. J. & K. R. C. & I. Co., Incorporated," I will ask you if this is the calculation that you referred to?

A. It is.

Q. 12. Now in the first column you have "Stations." I will ask you if those are the stations set forth and enumerated in Mr. Henderson's report?

A. They are.

Q. 13. And I will ask you if the next set of figures headed "Cut" is a correct calculation of the yardage between those cross sections in accordance with the cross sections of the depression shown by the report of Mr. Henderson, excepting his calculation of the area of the cross sections, is correct?

A. Yes, they are, and using the cross sections as given on Exhibit 29.

Q. 14. That is, you don't mean that that is the amount of the cut on the ground, but figuring it according to Mr. Henderson's figures?

A. That is it. I also mean that these cross sections were taken at

long intervals and while the cross sections may have been
1360 accurate and correct there may have been intermediate points
on the canal or intermediate cross sections which would cause
a wide difference in the total yardage between the two sections.

Q. 15. How far apart were some of these cross sections that were
given here. Do you remember?

A. I think there were some more than two miles apart.

Q. 16. So that you are simply figuring these in accordance with
those cross sections and assuming that they did correctly show the
average condition of the cut between the points indicated?

A. Yes.

Q. 17. Now, the next column headed "Banks plus 10 per cent,"
is that a correct computation of the area of the banks as shown by
the areas of the cross sections of the banks in Mr. Henderson's
cross sections between the points indicated, allowing 10 per cent for
shrinkage?

A. Yes, it is except that in case of dredger banks; I have calcu-
lated them without adding the 10 per cent.

Q. 18. The only instance of that is the places where it is marked
with a star, and indicated on the column "Banks without 10 per
cent"?

A. That is right.

Q. 19. You have done that work separately as to each county,
have you, Mr. Hammett?

A. I have.

Q. 20. This document marked "Summary," it being the last page
of the paper you hand me, is that a summary of the previous part
of the report?

A. It is. It is a statement of the totals as shown on the previous
pages, and a grand total thereof.

Q. 21. Have you any way of telling, Mr. Hammett, whether or
not the computations placed on this Exhibit 29, as to area of the
cross sections of the bank and the area of the cross sections of the
cut, whether or not those have been correctly computed?

A. No, they have not. I would like to change my answer on that.
I misunderstood the question. I thought it was whether they had
been correctly taken. Whether they had been correctly com-
1361 puted. We have the cross sections as shown on Exhibit 29,
and if those cross sections are correctly drawn from the sur-
vey notes, we can compute the area and see whether it agrees with
the area that is marked on there.

Q. 22. Did you test any of those to see whether the area was
correctly given or not.

A. I took rough tests in places and found that while they were
sometimes inaccurate, that might be due to the drawing and it might
be due to incorrect computing. But in many cases they appeared to
be inaccurate, but not to a great extent.

Mr. TREADWELL: We offer this in evidence in connection with the
testimony of the witness.

Mr. LANGHORNE: We object to it as incompetent; also on the

ground that it is not rebuttal; also on the ground that it is irrelevant.

The MASTER: I overrule the objection.

Mr. LANGHORNE: We take an exception.

(Marked Complainant's Exhibit No. 31.)

(By Mr. TREADWELL:)

Q. 23. Now, Mr. Hammett, if you went down there to reconstruct these canals just exactly as they are shown there on Mr. Henderson's cross sections, in some places you find the banks less than the cut, and sometimes you find the cut less than the banks, do you not?

A. Yes.

Q. 24. And if you went to construct those canals could you reconstruct them with the same amount of excavation as shown in the present banks?

A. Not to carry the same amount of water that they do.

Q. 25. What would be the least amount of excavation that you could do so as to carry the same amount of water, so as to construct those canals, that is as shown there on Mr. Henderson's cross sections?

A. If you take the same location of the canal you would have to do an amount of excavation equal to the greatest amount in either case; that is, if the cut were the greatest, you would have to do excavation equal to that, and if the banks were the greater
1362 you would have to do excavation equal to that, and either haul the excess dirt where the cut was the greater, to make the excessive banks from there on, on what is known as the "Borrow and Waste" system; that is to say, borrow dirt from another excavation to make the excessive banks or waste dirt from the excessive cut over what it took to build the banks.

Q. 26. Now I will ask you in a general way, Mr. Hammett, if you found any errors in the computation of this yardage in Mr. Henderson's report as compared with the yardage in the cross sections which he furnishes here.

A. I did in this way; there are some differences which could not have been the result of errors of computation, because they are so large. There are various small differences which might be due to the difference of method of calculation, or might be due to more cross sections, more intermediate cross sections being used, than are shown on Exhibit 29.

Q. 27. Now, Mr. Hammett, are you familiar with the percentage of shrinkage which will take place in excavated earth? What experience, if any, have you had on that subject?

A. Being in charge of earthwork, principally on railroad work, for about 14 years.

Q. 28. You testified here, if I remember it rightly, to the experience you had had on railroad construction?

A. Yes.

Q. 29. And what amount of shrinkage is allowed in railroad excavation, for shrinkage?

A. In banks constructed with a scraper where the scraper drives over the banks, a 10 per cent shrinkage is deducted from the contractor's estimate when the measurement is made in the bank; and where the bank is constructed by any method where the excavating machinery does not pass over the dirt which is deposited, 15 per cent is deducted.

Q. 30. Now that is for excavation which is not subject to the effects of water at all?

1363 A. Only the action of the elements, the rain and——

Q. 31. Now what is the result where there is water against the bank?

A. That there will be a greater shrinkage than where it is only subject to meteoric water.

Q. 32. While on that subject, Mr. Hammett, I will ask you whether or not it is necessary in these canals, and whether it is the fact that the water in the canal stands against the bank?

A. Yes.

Q. 33. Could you operate the canals at all, say to any considerable extent, if the water did not stand against the bank?

A. No, the water has to be carried in the canal to a higher level than the ground which it has to irrigate.

Q. 34. Now have you done any excavating work during the last couple of years where you used an excavator?

A. Yes.

Q. 35. What kind of an excavator did you use?

A. The New Era excavator.

Q. 36. What is the extreme length of the elevator of the New Era excavator, what they call the Senior excavator, or No. 1; sometimes called the Senior and sometimes called the No. 1, a maximum length of belt from the plough point to the end of the belt?

A. 22 feet.

Q. 37. Have you ever seen an attempt made by artificial contrivance, to extend that elevator?

A. Yes.

Q. 38. How is that done?

A. That was done by putting an extra tension on the belt and counter-weighting the other side of the machine.

Q. 39. What was the result?

A. Continual break-downs.

Q. 40. Do companies that sell these machines guarantee them to do anything of that kind in excess of the 22 feet for which they are built?

A. I have asked the company which sells this excavator in this City and they said that they would not.

Q. 41. In doing this excavating work where did you do it? In what did you do it?

A. What excavating work do you refer to?

1364 Q. 42. Well, you say you did some during the last two years in excavating canals?

A. Yes. There was what is known as Branch 5 of the Colony

canal or Dos Palos canal, belonging to the San Joaquin & Kings River Canal & Irrigation Co., was one of them.

Q. 43. What was the length of that canal?

A. 12,900 feet long.

Q. 44. Did you find that you could complete that canal with the use of an excavator?

A. No.

Q. 46. How did you have to build the canal?

A. I first ran the excavator through, taking out the cut and depositing it on the banks; then afterwards shaping the canal and compacting the banks by means of a four-horse Fresno scraper—by means of 4-horse Fresno scrapers.

Q. 48. Was that necessary in order to get the earth out of the trench and into the bank?

A. Yes.

Q. 49. Did you keep an account of the expense of constructing that canal?

A. Yes.

Q. 50. Have you got it here with you?

A. I have the totals and the deductions in regard to the costs of different items. (Producing.)

Q. 51. This document which you have handed me, headed "Branch No. 5 Colony Canal"—does that correctly state the length and the width of that canal, the depth of it, the average cross sections of the excavation and the total excavation in cubic yards?

A. It does.

Q. 52. And does it also show the expense of labor per cubic yard, and all of the expenses in connection with the building of that canal?

A. It does, the actual expenses.

Q. 53. And the total cost of the excavation, a little over 11 cents per yard?

A. Yes.

Q. 54. That is the correct total cost of that excavation, is it?

A. It is.

Q. 55. Is this an estimate, Mr. Hammett, or is this the actual expense that you were put to on doing that work?

A. This is the actual expense.

Q. 56. And was this built in January and February of 1908?

A. It was.

Mr. TREADWELL: In connection with the testimony of the witness we offer that document in evidence.

Mr. LANGHORNE: I object to it as incompetent.

The MASTER: The objection is overruled.

Mr. LANGHORNE: We take an exception.

(Marked "Complainant's Exhibit No. 32.")

By Mr. TREADWELL:)

Q. 57. Have you constructed in the last two years, Mr. Hammett, any of the structures on this canal which are set forth in the report of Mr. Henderson which is on file here?

A. I have.

Q. 58. Referring to the headgate set forth in Mr. Henderson's report, page 7, at Station 0 plus 30, which he puts a cost on of \$810, and a depreciation at 10 per cent, I will ask you when that was constructed?

A. In the latter part of 1907; November, 1907, it was started.

MR. TREADWELL: Your Honor will remember that this depreciation dates back to June, 1907, so he depreciates it 10 per cent before it was built.

Q. 59. You constructed that? It was constructed under your direction of superintendence, Mr. Hammett?

A. Yes.

Q. 60. What was the total cost of construction of that headgate?

A. \$2,585.29.

Q. 61. Now, referring to the two weirs on page 14 of Mr. Henderson's report, at Station 579 plus 88, which he puts a value on of \$601.50 and depreciates 8 per cent, and at Station 579 plus 71 which he puts a cost on of \$637.60, and also depreciates 80 per cent, I will ask you when those weirs were built?

A. The one in the main canal was built before I came, and while I know from hearsay, I am unable to give direct evidence 1366 on it.

Q. 62. Do the books show when they were constructed?

A. Yes, they say 1904.

Q. 63. And the other of those, the one in the parallel canal was built when?

A. That was built in February, 1908.

Q. 64. Those two weirs are the weirs at the beginning of the parallel canals, are they?

A. Yes, the double canals.

Q. 65. And the one that you built in 1908, what did that cost you?

A. It cost \$870.67 for the superstructure.

Q. 66. How about the sub-structure?

A. The old sub-structure was used in that place, being in good condition, although old.

Q. 67. So you were able to use the entire old sub-structure and simply build the superstructure on that?

A. Yes.

Q. 68. Now what is the condition of the one of those that were built in 1905, the one that was built in 1905?

A. It appeared to be in perfect condition.

Q. 69. Now, referring to the Firebaugh weir set forth on page 11 of Mr. Henderson's report, at Station 334 plus 53, the cost of which he gives as \$810.10 and the depreciation on which he figures at 20 per cent, I will ask you when that was built?

A. In October, 1907.

Q. 70. And what did it cost?

A. \$2,444.55.

Q. 71. Referring to the Crow Creek weir which is at Station

3570 plus 93, page 235, of Henderson's report, which he gives the cost of as \$594.30 and depreciates 20 per cent, I will ask you when that was constructed.

A. In August, 1907.

Q. 72. And what was the cost of it?

A. \$1,039.58.

Q. 73. Referring back to that Firebaugh weir at Station 334 plus 53, was there anything peculiar about that construction which cost this high amount of carpenter work, \$29.50 a thousand?

A. Yes, the method of construction was used by trenching and bracing the sub-structure below in trenches instead of driving piles, which made it more expensive to put in this sub-structure, 1367 especially as the foundation was very wet.

Q. 74. It was in a very wet place, was it?

A. Yes.

Q. 75. Was the kind of structure that you put in a kind of construction that was needed in that place?

A. No, I think driving piles would have been better.

Q. 76. And it might have been done a little cheaper?

A. It might have been done a little cheaper.

Q. 77. Referring to the bridge on page 28 of Mr. Henderson's report, at Station 0 plus 42, the cost of which he gives at \$390.50 and which he depreciates 20 per cent, I will ask you when that was constructed?

A. In December, 1907.

Q. 78. Now, referring to the bridge set forth on page 9 of Mr. Henderson's report, at Station 252 plus 73, which he puts a cost on of \$452.80 and depreciates 10 per cent, I will ask you when that was constructed?

A. In June, 1908.

Q. 79. Referring, Mr. Hammett, to the paper which you handed me and headed: "Actual Cost of Structures Built from July, 1907, to June, 1908, Labor purchased from April, 1907, to November, 1907," I will ask you if that paper gives in detail the items of the expense of building those various structures which you have last testified to?

A. It does.

Q. 80. And this correctly sets forth the amount paid for lumber, hauling, hardware, nails, carpenter work, piles, excavation, pumping and engineering in connection with those particular works?

A. It does.

Q. 81. That is a correct statement?

A. It is.

Mr. TREADWELL: As illustrating the testimony of this witness we offer that in evidence.

Mr. LANGHORNE: We object to that as incompetent.

The MASTER: I overrule the objection.

Mr. LANGHORNE: We take an exception.

(Marked Complainant's Exhibit No. 33.)

At the hour of 12 m. recess was had until 2 p. m., when proceedings were resumed as follows:

1368 Mr. TREADWELL: We wish to recall Mr. Southard for further cross-examination.

Mr. LANGHORNE: We object to the witness being called for further cross-examination. He was discharged yesterday, examined and cross-examined, and if counsel desires to call him he must call him as his own witness.

The MASTER: The objection is overruled.

Mr. LANGHORNE: We take an exception.

Cross-examination of ALBERT B. SOUTHARD, resumed.

By Mr. TREADWELL:

R. X Q. 41. Mr. Southard, I understood you by your testimony to state that in the work you did when you were on the Crocker property, in order to prepare the ground for the excavator, you had to do some work with the scraper at certain places. Is that correct?

A. Yes sir.

R. X Q. 42. And I also understood that in computing the cost per yard of the work of the excavator you counted the cost of that scraper work. Is that correct?

A. That particular work, yes sir.

R. X Q. 43. Now I did not understand you as to whether or not you included in your estimate of the cost of the excavator, the work which the scraper did after the excavator in throwing out and onto the banks the balance of the earth. Did you include that scraper work in your estimate of from three to five cents?

A. No sir, I did not mean to include that. I meant to state it this way, that in throwing the dirt in with the excavator it was necessary to tamp it down, which I did by running a harrow over it, and some places where the excavator would not reach far enough we used one or two scrapers along to pull that in. That work was charged in with the excavator work, and I arrived at 1369 the figure which I gave.

R. X Q. 44. But what part of the scraper work was it that you did outside of that estimate of from three to five cents?

A. The excavator I found not able to handle the dirt more than six feet, about six feet or six feet and a half high: that would be three feet down and three feet and a half up, about a seven foot bank, and above that we had to use scrapers altogether. That scraper work was not charged in against the excavator as that was all done by team work.

R. X Q. 45. And what did you estimate to be the total cost of that embankment, including both the scraper and the excavator work?

A. It ran about 7½ cents.

R. X Q. 46. That was the cost outside of your commission or profit?

A. Yes sir, outside of that.

R. X Q. 47. That would be added on top of it?

A. That would be added on top of it, yes.

R. X Q. 48. What would be the least amount, Mr. Southard, that you would be willing to take a contract for to build a canal on a

large scale, a 40-foot bottom, along the foothills of the San Joaquin valley on the west side of the river through the counties of Fresno, Merced and Stanislaus?

Mr. LANGHORNE: We object to that as not cross-examination.

The MASTER: The objection is overruled.

Mr. LANGHORNE: We take an exception.

A. I figured on some work in that country with several parties and we decided that 9 or 10 cents was about what that class of work was worth.

1370 Redirect examination.

By Mr. LANGHORNE:

R. D. Q. 1. Mr. Southard, where was this work that you figured on, you say for 9 or 10 cents?

A. Near Fresno.

R. D. Q. 2. Did that include your commission or profit?

A. That was to be the contract bid, yes sir. We decided that we would bid that.

R. D. Q. 3. That included the contractor's profit, did it?

A. Yes.

R. D. Q. 4. Now then, the question was asked you about running a canal around the foothills. Do I understand from that that the canal would have a decided grade around the hills, that there would be a decided grade or slope?

A. With a decided cut in some of it. That was the style of canal on which we were figuring, and that it would run partly in the valley land and that it would follow the edge of the hills so that you would get the advantage of the grade.

R. D. Q. 5. If there was no side-hill cutting, it would be cheaper, would it not?

A. No, not necessarily. That would depend upon the nature of the soil. The side-hill usually stands better. You can get your bank put in better shape.

R. D. Q. 6. Is it not more economical and cheaper to build a canal on a comparatively level plain than it would be around the contours of hills?

A. In a straight line, yes.

R. D. Q. 7. Yes, it would be cheaper to do it that way, would it not?

A. Yes, it would be cheaper to do it that way if you could find a country that is level enough.

Recross-examination.

By Mr. TREADWELL:

R. X Q. 1. When you say it is cheaper to build a straight canal through a level country, of course you mean in the aggregate, because there is less yardage?

A. Yes sir; less yardage, less work to it in that way, yes sir.

1371 Examination-in-chief of W. C. HAMMETT, resumed.

By Mr. TREADWELL:

Q. 82. Referring to this exhibit No. 33, Mr. Hammett, to these structures that you have testified to in the column headed "Average", does that express the average cost of lumber per thousand in all this work?

A. You refer to column 6?

Q. 83. The last column.

A. No, the average of that last column, the 9th column, refers to the average only of those two pages.

Q. 84. Per thousand feet?

A. Per thousand feet board measure.

Q. 85. And the hauling is also per thousand feet, is it?

A. The hauling is per thousand feet board measure, as stated at the top of the sheet.

Q. 86. And the 6th column is also headed, "Average." That is the average of those other four jobs that are referred to in the first four columns?

A. Yes.

Q. 88. And that was also per thousand feet?

A. Per thousand feet of board measure of lumber used in the structure.

Q. 88. Now in excavating earth with the excavator or any other method, Mr. Hammett, in throwing it up in the form of a bank, does that bank take a slope or not?

A. Yes, if the earth is not compacted in any way, but is dumped, it will take a certain slope; it will come to rest on a certain slope.

Q. 89. And what slope will that take?

A. It is very uniform for all kinds of dry material. It is generally reckoned in cross-sectioning all kinds of work with the exception of slate or shaling material, which runs in laminated pieces and in very fine sand of the nature of a quicksand—in all other materials it runs to between 1.4 and 1.6 horizontal to 1 vertical and is estimated in all kinds of work as 1.5.

Q. 90. Will it ever take a slope in soils that you have mentioned of 1 to 1?

A. Not when it is dry.

1372

Q. 91. I call your attention to Exhibit 30, headed "Ideal Cross-section of 40 foot Canal, 8 feet deep." Did you prepare that, Mr. Hammett?

A. I did.

Q. 92. And are the computations set forth on that correctly made?

A. They are.

Q. 93. I don't know whether you can answer this, Mr. Hammett, but I will say: "What difference will it make in the amount of excavation which would have to be removed from the upper side of that canal in case instead of making a finished upper bank you desired to make two shells of the upper bank in the same way as you have two shells of the lower bank?"

A. Do I understand you to mean and keep the finished dimensions of the bank the same?

Q. 94. Keep the slope the same.

A. Keep the finish the same?

Q. 95. Yes.

A. 4.2 top width and 21.38 feet bottom width?

Q. 96. Could that be done?

A. Could what be done?

Q. 97. Could you make that, keeping those widths and having the two outer shells?

A. Yes. But it would leave an extremely small amount to be filled on the top of the bank.

Q. 98. The amount to be filled in the top would be very small?

A. Yes.

Q. 99. And would not materially change the amount of excavation that you would have to take from the canal with the excavator in order to make those two shells?

A. Not to any great extent.

Q. 100. I would ask you, Mr. Hammett, if it would be possible to determine the amount of silt, if any, which had deposited in these canals, to simply go along the canals and put down in the canal a lath and measure the depth of the water at the various places? Would that show in any way the amount of silt that had been deposited and whether any silt had deposited in the canals?

A. That alone would not.

Q. 101. That measure of the depth of the water at various places would not give you any material upon which you could determine whether there had been deposited, or if so, how much silt there had been deposited? That is correct, is it?

A. That is correct.

Q. 102. Have you seen the report which Mr. Sloan filed here as to the structures of this canal?

A. Yes, I saw it a month or so ago.

Q. 103. Can you locate any of those structures from that report?

A. No, I could not.

Q. 104. He gives the first thing in his report, a stop-gate 24 by 30. Do you remember whether or not the last stop-gate in the canal answers to that description, at either end of the canal?

A. The notes that we have here are not complete enough in regard to dimensions to say whether that would cover it or not; and besides I don't know whether the dimensions refer to length of floor or width between the abutments. I don't know which they refer. I suppose that the dimensions refer to the length of the floor of the weir and the width between the abutments, but I am unable to tell from that report which belongs to which.

Q. 105. Now, referring to the testimony of Professor Fortier, he states "the Fresno Canal & Irrigation Co. diverts water from the Kings river to supply something like 180,000 acres in the vicinity of Fresno, California. The subsoil of this land was formerly dry and irrigation was a necessity, but during the past 15 years the water table has risen near the surface and in much of the low lying land surface irrigation is no longer needed. This is particularly true of a tract of land comprising some 60,000 acres, located southwest of the city of Fresno, a large part of which is injuriously affected by

both ground water and alkali." I would ask you if there is any substantial part of land under the canal of the complainant which has got into that condition expressed there, where the water
 1374 table has risen in such a way that surface irrigation is no longer needed or becomes in any way harmful?

Mr. LANGHORNE: We object to that as not rebuttal. This is their own witness.

The MASTER: The objection is overruled.

Mr. LANGHORNE: We take an exception.

A. There is no tract of land under the San Joaquin canal system of any extent which has ever been irrigated which is not still under irrigation occasionally, perhaps not every year. But it depends a good deal on the length of the rainy season, whether the owners of that land irrigate or not. But there is none on which irrigation has been abandoned on account of having enough water in the soil on account of the soil having been spoiled by too much water.

Cross-examination.

By Mr. LANGHORNE:

X Q. 1. Mr. Hammett, referring to exhibit 32, to the work that you did with the New Era excavator, how many days were you working constructing that canal?

A. 28 days the excavator was used.

X Q. 2. Were there any times that that amount of yardage you have mentioned was excavated, that there was work done there with the excavator that you used?

A. I don't quite understand the question.

X Q. 3. You say that 28 days the excavator was used?

A. Yes.

X Q. 4. How many other days have you figured in there for doing that work besides the 28 days?

A. There were an average of about six scrapers used, and the work extended altogether—the scraping and excavator work extended over perhaps 50 working days.

X Q. 5. How many hours a day?

A. They worked not less than 10 hours a day. They had no regular working hours in the valley; a 10 hour day.
 1375 X Q. 6. How many men were employed?

A. There would be 14 men on an average.

X Q. 7. What were those men paid a day?

A. \$1.33.

X Q. 8. How many horses were there employed?

A. About an average of 50.

X Q. 9. Whose horses were they?

A. They belonged to Miller & Lux.

X Q. 10. Whose excavator was it?

A. That belonged to Miller & Lux.

X Q. 11. Whose scrapers were used?

A. Miller & Lux's.

X Q. 12. Who furnished the horse feed?

A. Miller & Lux furnished part of it and part was bought directly by the canal company.

X Q. 13. And whose men were employed?

A. They were men paid by the canal company.

X Q. 14. Didn't the men also work for Miller & Lux?

A. They were men who would work for anyone that employs them down there. At this time they were working for the canal company.

X Q. 15. They were usually employed by Miller & Lux, were they not?

A. Not necessarily, no sir.

X Q. 16. Where did they live?

A. They lived in the cook house, in the camp for this construction work.

X Q. 17. Who boarded the men?

A. They were boarded there by the canal company.

X Q. 18. Whose wagon was it that was used?

A. That was Miller & Lux's wagon.

X Q. 19. And didn't you buy the horse feed from Miller & Lux?

A. No, part of the horse feed shown in there is only a part of the whole, and that was bought by the canal company from outside parties. The part they bought from Miller & Lux was not included in there.

X Q. 20. Did you keep an account yourself of the cost of 1376 each one of these items on this exhibit 32?

A. No, that was done by the regular clerical force.

X Q. 21. In the field?

A. The timekeeper took it in the field, yes.

X Q. 22. The timekeeper took it in the field? What was his name?

A. James Vandervere.

X Q. 23. Is he an employé of Miller & Lux?

A. I believe that he is an employé of Miller & Lux.

X Q. 24. Was he not employed by Miller & Lux at that time?

A. I would like to modify that. I am not sure whether Mr. Vandervere took the time on this, or whether it was done directly by the canal company foreman. It is usual on the canal construction work to have the foreman keep the time.

X Q. 25. You did not keep the account of the labor, did you?

A. I did not.

X Q. 26. You did not keep the account of the board, did you?

A. I did not.

X Q. 27. You did not keep the account of the horse hire, did you?

A. No.

X Q. 28. Did you keep the account of any item in this account?

A. I only kept the engineering account, that is, I took the yardage. But the accounts there were taken directly from the books.

X Q. 29. But you did not pay out the money yourself, did you?

A. I did not pay out the money.

X Q. 30. And you made this statement then from accounts kept by other people, did you?

A. I did.

X Q. 31. Now in regard to exhibit 33, will you please look at the item "Excavation for the Main Headgate" and state the amount of cubic yards that was excavated?

A. Do I understand the No. 33 to be the cost of structures?

X Q. 32. Yes sir.

A. In the excavation for the headgate no yardage was taken and no measurement was made.

1377 X Q. 33. How did you come to charge this \$590.60 for that?

A. That was the actual labor and other expenses expended for that excavation.

X Q. 34. Did you superintend the work?

A. Yes.

X Q. 35. You know about what the excavation was then, don't you?

A. Yes, it was principally filling behind the bulkheads.

X Q. 36. Did it exceed 330 cubic yards?

A. I should think not, though no measurement was made.

X Q. 37. That would be nearly \$1 per yard, would it not?

A. I don't understand. \$590.60, if it didn't exceed—

X Q. 38. Did it exceed 230 cubic yards?

A. Well, I don't know about it. It consisted of the various work in regard to putting in and to the head gate, which cannot be reduced to yardage, with the excavation upon the bulkheads and the back filling of those bulkheads.

X Q. 39. Well, you can certainly measure the amount of excavation, can't you?

A. You could of course measure what is done, but since part of this dirt is moved several times in the construction of the headgate, it would not tell anything.

X Q. 40. Well, you didn't measure it as a matter of fact?

A. No, I did not.

X Q. 41. You did not measure the earth that went in behind the wings of the bulkhead?

A. No.

X Q. 42. Now, how many piles did you put in that work?

A. I have not a record here. It was about 60 I should say.

X Q. 43. How large was the cut? That is, what was the width and length of the floor?

A. It was 24 feet long, if I remember rightly; 24 or 26; and the width between the bulkheads was 50 feet.

X Q. 44. Now, you think that 60 piles were about right for that?

A. About that, including the piles that were put in the bulkhead. There were four piles put beneath each bent and there were 11 bents. That would make 44.

1378 X Q. 45. How long were the piles?

A. The average about 24 feet, I think. Those driven near the center of the water were in softer ground than those driven near the edge.

X Q. 46. Do you know — many piles were put in?

A. I don't know. I have the actual footage of the piles that were put in, but I have not got it here.

X Q. 47. Now that head-gate was put in where it was wet, was it not?

A. Yes.

X Q. 48. Would it cost as much if it were put in where it was dry?

A. Put in where it was dry?

X Q. 49. Yes.

A. No, it would not.

X Q. 50. How much less would it cost?

A. You can strike a fair sample of that in the difference between column 1 and column 4, the Crow Creek weir, it was put in dry, and you will note that the carpenter labor on the main headgate came to \$25 a thousand and on the Crow Creek weir it came to \$22.75 a thousand. The difference between those two would about represent the difference between wet and dry work.

X Q. 51. And is that the only difference between the wet and dry work in the carpenter work?

A. Of course it is the difference in the—that is the only difference between doing it in a wet and a dry canal, yes.

X Q. 52. Now would it make any difference in the cost of excavation if you were working in wet ground, under water?

A. Oh, yes, it would, provided that excavation represented the actual excavation for the putting of the foot wall.

X Q. 53. Well, what difference would that make?

A. Because the excavation for the bulkheads and for filling behind the bulkheads is done in dry dirt in any case.

X Q. 54. Then at least half of your figures for excavation are due to actual digging, are they not?

A. I don't understand your question.

X Q. 55. I mean digging a trench or for a foundation.

A. No, in case of the headgate it was not.

1379 X Q. 56. Well, now what proportion would you estimate as a matter of excavation? How much cheaper would it be to construct, to do the excavation and filling in dry soil and material than in wet?

A. You can't make any estimate without a specific example.

X Q. 57. Now then these gates and weirs that you have mentioned here in exhibit 33, were they not built—or rather, a rebuilding of old structures?

A. One only. The parallel canal headgate was the only one.

X Q. 58. Was there not an old structure at the Firebaugh weir, an old weir there?

A. Not in the same place.

X Q. 59. And at the Crow Creek weir?

A. No, there was none there at all.

X Q. 60. How many feet apart were they?

A. What ones?

X Q. 61. The Firebaugh weir.

A. The Firebaugh weir, they were about 300 feet apart.

X Q. 62. And the outside canal bridge?

A. There had been a bridge there before, had there not? A. No.

X Q. 63. And this Helm Camp bridge?

— There had been a bridge there before but not in the same place. It had not been in the same place. It was removed at the time the dredger went there.

X Q. 64. Who furnished the lumber for these headgates, and so on?

A. The canal company bought it.

X Q. 65. Did Miller & Lux do any of that work?

A. No.

X Q. 66. Were any of their men employed on that work?

A. I believe not.

X Q. 67. Did you buy any supplies from Miller & Lux?

A. Not to any great extent. Of course if they needed a keg of nails, if they ran a keg of nails or so short at any time, Miller & Lux's stores being the nearest ones would be the ones where the short supplies were bought. But the full bill of material for these structures was made out before commencing the work and the material was obtained from wholesalers.

X Q. 68. Did Miller & Lux buy them for the canal company?

A. I believe not.

X Q. 69. Do you know?

A. I know they were bought by the canal company. Whether or not Miller & Lux acted as their agent or not, I don't know.

X Q. 70. Did you buy them yourself?

A. I did not. I merely put in the bill of the material to the canal superintendent.

X Q. 71. Did you keep the accounts in regard to the building of these structures yourself?

A. I did not.

X Q. 72. Did you keep the time of the men yourself?

A. I did not.

X Q. 73. Did you pay the carpenters or the other men yourself?

A. I did not.

X Q. 74. Then you made up this account from accounts kept by other parties?

A. I made the account from regular books which were kept by employes employed for that purpose.

X Q. 75. How did you know they were record books?

A. Because they were books of the canal company that I have access to in my official capacity.

X Q. 76. Did you keep the books?

A. I did not.

X Q. 77. Do you know that they are correctly kept?

A. No, I do not.

X Q. 78. Then all you know, Mr. Hammett, about these matters on this exhibit is that you have made up here an estimate from data furnished you by other parties? Is that so?

A. Data which I have taken from the books, yes sir.

1381 Redirect examination.

By Mr. TREADWELL:

R. D. Q. 1. In figuring the cost of these structures, there is no profit figured in there at all, is there, to the contractor or anything of that kind, is there?

A. There is not.

R. D. Q. 2. And is there anything charged to general superintendence against that as the cost of those structures?

A. No.

R. D. Q. 3. You include the actual engineering on the work?

A. The actual engineering.

R. D. Q. 4. And so far as any proportion of the general president's salary and the salary of the different officers figures in the expense, that is not estimated at all?

A. There is no office expense figured whatever. The engineering on here is the cost of drafting, blue printing, making out bills of materials and the surveying work necessary to build the structure.

R. D. Q. 5. Now you say that you don't know as to whether these books were correctly kept? They are the books used in the regular business of the canal company, are they?

A. They are.

R. D. Q. 6. Right along?

A. Yes.

R. D. Q. 7. And they are made up in the regular course of business by bookkeepers who are employed for that purpose, are they?

A. They are.

R. D. Q. 8. In regard to the use of an excavator, Mr. Hammett, is it possible in your experience to keep an excavator working right up to the maximum capacity of a 10-hour day, during the whole of a 10-hour day?

A. It might be possible for a single 10-hour day, but I never knew a case where an excavator over any considerable length of time worked its full time.

R. D. Q. 9. To its maximum capacity?

A. To its maximum capacity.

1382 Recross-examination.

By Mr. TREADWELL:

R. X Q. 1. I will ask you, Mr. Hammett, if you were building a large work such as these canals you would have quite a number of excavators, would you not?

A. Yes.

R. X Q. 2. You would have to have excavators, would you not, to take the place of those that were broken down from time to time?

A. Yes sir.

R. X Q. 3. And you would have to have extra traction engines, would you not?

A. Yes.

R. X Q. 4. And you would have to have excavators of different capacities, would you not?

A. Yes.

Mr. LANGHORNE: If your honor please, we move to strike out Exhibits 32 and 33 on the ground that they are incompetent, as appears from the cross-examination of this witness.

The MASTER: I overrule the objection.

Mr. LANGHORNE: We take an exception.

Mr. TREADWELL: We close our case.

Case submitted. Complainant will serve defendant- with opening statement on April 26. Defendant- will reply on May 5, and the Master will hear the matter on May 10.

1383 STATE AND NORTHERN DISTRICT OF CALIFORNIA.

City and County of San Francisco, ss:

I hereby certify that the foregoing 973 pages, bound in three volumes, together with the accompanying exhibits introduced in connection with the testimony, comprise a full, true and correct record of the testimony given and the proceedings had before me upon the hearing of the matter stated in the caption hereof.

Dated this 31st day of March, 1909.

E. H. HEACOCK,
Master in Chancery, etc.

(Endorsed:) Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1384 COMPLAINANT'S EXHIBIT No. 1.

Estimated Cost of the Headworks and Sundry Items of the San Joaquin and King River Canal and Irrigation Company in Fresno County.

San Joaquin River Weir	Page 1	\$54,046.50
Controlling Weir at Headgate	" 2	7,785.05
Head Gate Main Canal	" 3	4,853.86
" " China Slough	" 3	3,811.82
Canal Station at Head Gates	" 3	1,455.00
Machinery and Tools	" 4	12,120.00
Surveying and Telephoning Instruments	" 4	607.00
Office Furniture	" 4	50.00
Total		\$84,732.23

San Francisco, Cal., December 24th, 1906.

R. H. GOODWIN,
Consulting Engineer.

1385

Headworks, San Juan River Weir.

380 x 34 x 16.

Lumber R W	at \$27 M ft.	.....	\$228.00	\$6,156.00
" O P	" 27 " "	.....	15.00	405.00
" Weirboards	" 50 " "	.....	21.66	1,083.00
" Battens	" 30 " "	.....	9.00	270.00
" Sheet Piles O P	" 27 " "	.....	288.70	7,794.90
" Square " O P	" 27 " "	.....	16.32	440.64
" Boom " O P	400 ft. at 25¢	....	3.32	83.00
Carpenter Work	at \$10		582.00	5,820.00
Freight & Haul.	" 10		do.	5,820.00
Pile driving made 864	" 2.50			2,160.00
" " sheet 2,568	" 1.00			2,568.00
" " square 64	" 1.50			96.00
" " do. Boom 80	" 2.50			200.00
Iron in Draw Special				3,620.00
False Work				150.00
Earthwork, Excavation & Back Fill				3,000.00
Fish Ladder Estimated				200.00
Blacksmith & Helper 4 mos. at \$200.				800.00
Pumping 4 mos. " \$1,000.				4,000.00
Incidental Expenses, Bolts, etc., 10%				4,466.65
Engineering, General Superintendence, etc., 10%				4,913.31
Total Estimated Cost				\$54,046.50

1386 Headworks Controlling Weir at Head Gate, Main Canal.

48 x 30 x 12.

Lumber R W	at \$27 M ft.	.....	20.40	\$550.00
" O P	" 27 " "	.....	3.07	82.89
" Weirboards	" 50 " "	.....	1.25	62.50
" Battens	" 30 " "	.....	1.00	30.00
" Piles Sheet	" 27 " "	.....	36.12	975.24
" " Round 5,290 ft.	" 25¢	.....	42.00	1,322.50
Carpenter Work	" \$10 " "	.....	103.84	1,038.40
Freight & Haul.	" 10 " "	.....	do.	1,038.40
Pile Driv. Round 140 ft.	" 2	.....		280.00
" " Sheet 554 " "	" 1	.....		554.00
Earthwork, Excavation & Back Fill				500.00
Incidental Expenses, Bolts, Tie-rods, etc., 10%				643.39
Engineering, General Superintendence, etc., etc. 10%				707.73
Total				7,785.05

Head Gate, Main Canal.

48 x 20 x 12.

Lumber R W	at \$27	M ft.	.....	\$9.54	257.58
" O P	" 27	" "	.....	8.44	227.88
" Weirboards	" 50	" "	.....	1.72	86.00
" Battens	" 30	" "	.....	0.50	15.00
" Piles O P	" 27	" "	.....	19.00	513.00
" " Round 2,760					
ft.	" 25¢		.....	21.00	890.00
Carpenter Work	" 10	" "	.....	61.20	612.00
Freight & Haul.	" 10	" "	.....	do.	612.00
Pile Driv. Round 92 ft.	" 2		.....		184.00
" " Sheet 414 "	" 1		.....		414.00

Total forward \$3,811.46

1387

Head Works.

Brought Forward	\$3,811.46
Earthwork, Excavation & back fill	200.00
Incidental Expenses, Tie-rods, Bolts, etc., 10%	401.14
Engineering, General Superintendence, etc., 10%	441.26

Total \$4,853.86

Head Gate, China Slough.

80 x 22 x 12.

Lumber R W	at \$27	M ft.	.....	25.65	\$692.55
" O P	" 27	" "	.....	1.20	32.40
" Weirboards	" 50	" "	.....	2.35	117.50
" Battens	" 30	" "	.....	1.20	36.00
" Piles O P	" 27	" "	.....	22.90	618.30
Carpenter Work	" 10	" "	.....	53.30	533.00
Freight & Haul.	" 10	" "	.....	do.	533.00
Pile Driv. Sheet 390 ft.	" 1		.....		390.00
Earthwork, Excavation & Back Fill			.....		200.00
Incidental Expenses, etc., 10%			.....		315.27
Engineering, General Superintendence, etc., 10%			.....		346.86

Total \$3,814.82

Station at Headgates.

House, Barn, Tool House, Fencing, etc.	\$750.00
Horses	220.00
Cart, Wagons & Harnesses	485.00

Total \$1,455.00

1388

*Sundry Items.**Machinery and Tools.*

1 Dredger	10,500.00
1 Pile Driver 32 ft.	\$130.00
Hammer, 2,000 lbs. at 10¢	200.00
	330.00
1 Pile Driver 32 ft.	120.00
Hammer, 1,250 lbs. " 10¢	125.00
	245.00
1 Pile Driver 26 ft.	100.00
Hammer, 800 lbs. " 10¢	80.00
	180.00
1 Drag Chain	75.00
8 Scrapers at \$5.	40.00
2 Wheel " " 40.	80.00
3 Plows " " 15.	45.00
Stretchers, Chains, etc.	25.00
Scow and Skiff	100.00
Blacksmith and Carpenter Tools, Picks and Miscellaneous Tools	500.00
	\$12,120.00

Surveying and Telephone Instruments.

1 Transit	\$100.00
2 Levels at \$80	160.00
1 Rod	12.00
	\$272.00
10 Telephone Instruments	135.00
10 Transmitters, Receivers, etc.	200.00
	335.00
Total	\$607.00

Office Furniture.

Los Banos Office—Safe and Chair	\$50.00
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1389 *Estimated Cost of the Works of the San Joaquin and Kings River Canal and Irrigation Company in Fresno County, Cal.*

Main Canal	Page 1	\$106,215.48
Parallel Canal	" 11	50,200.16
Des Palos Main Canal	" 18	42,558.68
" " Branch Canal No. 1	" 31	11,490.00
" " " " " 2	" 38	4,726.65
Outside Canal	" 43	82,134.10
Outlet Canal No. 1	" 51	5,270.73
" " " 2	" 53	4,299.43
" " " 3	" 55	6,052.15

Total \$312,947.38

San Francisco, Cal., December 24th, 1906.

R. H. GOODWIN,
Consulting Engineer.

1390

Fresno County.

Estimated Cost of Main Canal.

Stop and Outlet Gates, Bridges, etc.	\$20,945.33
Earth Excavation, China Slough, 17,000 Cubic yards	850.00
" " @ 5¢	
Main Canal 732,900 " "	73,290.00
@ 10¢	1,474.20
Telephone Line 21.06 Miles @ \$70.00	9,655.95
Engineering and General Superintendence, etc., 10%.	
Total Estimated Cost	\$106,215.48

Right of way 510.5 acres @ —.

List of stop and outlet gates, bridges, etc., on following pages.

1391

Main Canal.

Station 0-00. Head Gate.

Bridge 80 x 14 ft. China Slough.

Lumber R W	at \$27 M Ft. . . .	1.48	\$39.96
" O P	" 27 " " . . .	6.42	173.34
Carpenter Work	" 7 " " . . .	7.90	55.30
Freight & Haul.	" 9 " " . . .	do.	71.10
Earthwork			20.00
Incidental Expenses, etc., 5%			17.98

Estimated Cost 377.68

48-43. Waste Gate. 20 x 24 x 10.

Lumber R W	at \$27 M Ft. . . .	9.00	243.00
" O P	" 27 " " . . .	1.40	378.00
" Weirboards @	50 " " . . .	.56	28.00
" Battens	at 30 " " . . .	.80	24.00
Carpenter Work	" 10 " " . . .	11.76	117.60
Freight & Haul.	" 10 " " . . .	do.	117.60
Earthwork, Excavation & Back fill			50.00
Incidental Expenses, etc., 10%			95.82

Estimated Cost 1,054.02

59-41. Outlet Gate. 6 x 18 x 5.

Lumber R W	at \$27 M Ft...	3.95	106.65
" O P	" 27 " " ...	.40	10.80
" Battens	" 30 " " ...	.15	4.50
Carpenter Work	" 10 " " ...	4.50	45.00
Freight & Haul.	" 10 " " ...	do.	45.00
Earthwork, excavation & Back fill.....			30.00
Incidental Expenses, etc., 10%.....			24.19

Estimated Cost	266.14
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Total forward	\$1,697.84
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Fresno County.

1392 Main Canal.

Brought Forward	\$1,697.84
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74-16. Outlet Gate. 8 x 16 x 5.

Lumber R W	at \$27 M ft...	4.08	\$110.16
" O P	" 27 " "48	12.96
" Battens	" 30 " "22	6.60
Carpenter Work	" 10 " " ...	4.78	47.80
Freight & Haul.	" 10 " " ...	do.	47.80
Earthwork, excavation & back fill			30.00
Incidental Expenses, etc., 10%.....			25.53

Estimated Cost	280.85
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75-01. Waste Gate. 20 x 24 x 9.

Same as at Sta. 48-43	1,054.02
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86-00. Outlet Gate. 6 x 18 x 5.

Same as at Sta. 59-41	266.14
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108-98. Outlet Gate. 8 x 18 x 6.

Same as at Sta. 74-16.....	280.85
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137-07. Bridge. 116-16.⁴

Lumber R W	at \$27 M ft...	3.95	106.65
" O P	" 27 " " ...	14.80	399.60
Carpenter Work	" 5 " " ...	18.75	93.75
Freight & Haul.	" 10 " " ...	do.	187.50
Driv. Piles 32	" 2.00.....		64.00
Earthwork			20.00
Incidental Expenses, etc., 5%.....			43.57

915.07

137-07. Stop Gate. 80 x 24 x 12.

Lumber R W	at \$27	M Ft. . . .	36.46	984.42
" O P	" 27	" " . . .	1.24	33.48
" Weirboards	" 50	" " . . .	2.35	117.50
Totals Forward			40.05	\$1,135.40
				\$4,494.77

Fresno Co.

1393

Main Canal.

Brought Forward		M Ft. . . .	40.05	\$1,135.40	\$4,494.77
Lumber Battens	at \$30	" " . . .	2.20	66.00	
" Piles	" 27	" " . . .	33.60	907.20	
Carpenter Work	" 10	" " . . .	75.85	758.50	
Freight & Haul.	" 10	" " . . .	do.	758.50	
Pile Driv. Sheet 478 at 1.00				478.00	
Earthwork, excavation & back fill				300.00	
Incidental Expenses, etc., 10%				440.36	
Estimated Cost					4,843.26

259-47. Waste Gate. 14 x 18 x 7.

Lumber R W	at \$27	M Ft. . . .	4.80	129.60
" O P	" 27	" " . . .	.80	21.60
" Weirboards at	50	" " . . .	.22	11.00
" Battens	at 30	" " . . .	.45	13.50
Carpenter Work	" 10	" " . . .	6.27	62.70
Freight & Haul.	" 9	" " . . .	do.	56.43
Earthwork, excavation & Back fill				40.00
Incidental Expenses, etc., 10%				33.48
Estimated Cost				368.31

308-32. Bridge. 54 x 16.

Lumber R W	at \$27	M Ft. . . .	1.84	49.68
" O P	" 27	" " . . .	4.96	133.92
Carpenter Work	" 5	" " . . .	6.80	34.00
Freight & Haul.	" 9	" " . . .	do.	61.20
Earthwork				25.00
Incidental Expenses, etc., 5%				15.19
Estimated Cost				318.99
Total Forward				\$10,026.03

Fresno Co.

1394

Main Canal.

Brought Forward \$10,026.03

332-60. Waste Gate. 49 x 24 x 10.

Lumber R W	at \$27	M Ft.	14.80	\$399.60
" O P	" 27	" "	3.60	97.20
" Weirboards @	50	" "	1.40	70.00
" Battens	" 30	" "	1.60	48.00
Carpenter Work	at 10	" "	21.40	214.00
Freight & Haul.	" 9	" "		192.60
Earthwork, excavation & Back fill.....				70.00
Incidental Expenses, etc., 10%.....				109.14

1,200.54

336-25. Outlet Gate. 7 x 20 x 7.

Same as at Sta. 74-16..... 280.85

336-80. Outlet Gate. 20 x 24 x 10.

Same as at Sta. 48-43 1,054.02

337-12. Stop Gate. 49 x 18 x 10.

Lumber R W	at \$27	M Ft.	13.30	359.10
" O P	" 27	" "	3.10	83.70
" Weirboards @	50	" "	1.40	70.00
" Battens	at 30	" "	1.60	48.00
Carpenter Work	" 10	" "	19.40	194.00
Freight & Haul.	" 9	" "	do.	174.60
Earthwork, excavation & back fill.....				60.00
Incidental Expenses, etc., 10%.....				98.90

Estimated Cost 1,088.30

363-93. Bridge. 75-16.

Lumber R W	at \$27	M Ft.	2.70	72.90
" O P	" 27	" "	8.80	237.60
Carpenter Work	" 5	" "	11.50	57.50

Totals Forward " " 11.50 368.00 \$13,649.74

Fresno Co.

1395

Main Canal.

Brought Forward	M ft.	11.50	\$368.00	\$13,649.74
Freight & Haul. at \$9	" "	do.	103.50	
Earthwork			25.00	
Incidental Expenses, etc., 5%.....			24.83	

Estimated Cost 521.33

378-28. Bridge. 62 x 16.

Lumber R W	at \$27 M ft....	2.24	60.48
" O P	" 27 " "	5.91	159.57
Carpenter Work	" 5 " "	8.15	40.75
Freight & Haul.	" 9 " "	do.	75.35
Earthwork	.....		25.00
Incidental Expenses, etc., 5%	.....		17.95

Estimated Cost 377.10

495-82. Bridge. 70 x 12.

Lumber R W	at \$27 M ft....	1.51	40.77
" O P	" 27 " "	4.76	128.52
Carpenter Work	" 5 " "	6.27	31.35
Freight & Haul.	" 9 " "	do.	56.43
Earthwork	.....		25.00
Incidental Expenses, etc., 5%	.....		14.10

Estimated Cost 296.17

502-00. Outlet Gate. 6 x 16 x 5.

Same as at Sta. 59-41 266.14

555-90. Outlet Gate. 10 x 20 x 7.

Lumber R W	at \$27 M ft....	4.50	121.50
" O P	" 27 " " ....	.60	16.20
" Battens	" 30 " " ....	.40	12.00
" Weirboards@	50 " " ....	.20	10.00

Total Forward " " 5.70 \$159.70 \$15,110.48

Fresno Co.

1396

Main Canal.

Brought Forward	M Ft....	5.70	\$159.70	\$15,110.48
Carpenter Work	at \$10 M ft....	do.	57.00	
Freight & Haul.	" 9 " "	do.	51.30	
Earthwork, excavation & Back fill.....			30.00	
Incidental Expenses, etc., 10%	.....		29.80	

Estimated Cost 327.80

578-28. Bridge. 63 x 16.

Lumber R W	at \$27	M ft. . . .	2.15	58.05
" O P	" 27	" "	7.35	198.45
Carpenter Work	" 5	" "	9.50	47.50
Freight & Haul.	" 9	" "	do.	85.50
Earthwork				25.00
Incidental Expenses, etc., 5%				20.72

Estimated Cost 435.22

585-56. Stop Gate. 38 x 22 x 10.

Lumber R W	at \$27	M ft. . . .	13.00	351.00
" O P	" 27	" "	3.20	86.40
" Weirboards @	50	" "	1.00	50.00
" Battens	at 30	" " . . . .	.80	24.00
Carpenter Work	" 10	" "	18.00	180.00
Freight & Haul.	" 9	" "	do.	162.00
Earthwork, excavation & Back fill				67.00
Incidental Expenses, etc., 10%				92.04

Estimated Cost 1,012.44

754-40. Outlet Gate. 5 ft. Opening.

Lumber R W	at \$27	M ft. . . .	4.10	110.70
" O P	" 27	" " . . . .	.40	10.80
Carpenter Work	" 10	" "	4.50	45.00

Totals forward " " . . . 4.50 166.50 \$16,885.94

Fresno Co.

1397

Main Canal.

Brought Forward	M Ft. . . .	4.50	\$166.50	\$16,885.94
Freight & Haul, at \$9	" "	do.	40.50	
Earthwork, excavation & Back fill			25.00	
Incidental Expenses, etc., 10%			23.20	

Estimated Cost 255.20

761-50. Inlet Box. 6 x 2 x 28.

Lumber R W	at \$27	M ft. . . .	2.50	67.50
Carpenter Work	" 5	" "	do.	12.50
Freight & Haul.	" 9	" "	do.	22.50
Earthwork, excavation & back fill				10.00
Incidental Expenses, etc., 5%				5.62

Estimated Cost 118.12

762-13. Bridge. 62 x 14.

Lumber R W	at \$27	M ft.	1.65	44.55
" O P	" 27	" "	5.65	152.55
Carpenter Work	" 5	" "	7.30	36.50
Freight & Haul.	" 9	" "	do.	65.70
Earthwork				25.00
Incidental Expenses, etc., 5%				16.21

Estimated Cost 340.51

767-00. Inlet Gate. 12 ft. Opening. Outlet Canal No. 2.

Lumber R W	at \$27	M ft.	5.00	135.00
" O P	" 27	" "	1.00	27.00
Carpenter Work	" 10	" "	6.00	60.00
Freight & Haul	" 9	" "	do.	54.00
Earthwork, excavation & back fill				30.00
Incidental Expenses, etc., 10%				30.60

Estimated Cost 336.60

Total forward \$17,936.37

Fresno Co.

1398

Main Canal.

Brought Forward \$17,936.37

810-32. Outlet Gate. 5 ft. Opening.

Same as at Sta. 754-40 255.20

893-20. Outlet Gate. 5 ft. Opening.

Same as at Sta. 754-40 255.20

894-24. Bridge. 68 x 16.

Lumber R W	at \$27	M ft.	3.00	81.00
" O P	" 27	" "	6.00	162.00
Carpenter Work	" 5	" "	9.00	45.00
Freight & Haul.	" 9	" "	do.	81.00
Earthwork				25.00
Incidental Expenses, etc., 5%				19.70

Estimated Cost 413.70

1001-88. Outlet Gate. 5 ft. Opening.

Same as at Sta. 754-40 255.20

1013-30. Inlet Gate. 10 ft. Opening.

Lumber R W	at \$27	M ft.	5.00	135.00
" O P	" 27	" " ....	.32	8.64
Carpenter Work	" 10	" "	5.32	53.20
Freight & Haul.	" 10	" "	do.	53.20
Earthwork				30.00
Incidental Expenses, etc., 10%				28.00

Estimated Cost 308.04

1029-40. Bridge. 67 x 14.

Lumber R W	at \$27	M ft.	1.28	34.56
" O P	" 27	" "	4.32	116.64
Freight & Haul.	" 10	" "	5.60	56.00
Carpenter Work	" 5	" "	do.	28.00

Totals forward " " 11.20 \$235.20 \$19,423.71

Fresno Co.

1399

Main Canal.

Brought Forward	M ft.	11.20	\$235.20	\$19,423.71
Earthwork, excavation & back fill.			25.00	
Incidental Expenses, etc., 10%			26.02	

Estimated Cost 286.22

1056-67. Outlet Gate. 5 ft. Opening.

Same as at Sta. 754-40. 255.20

1083-52. Outlet Gate. 5 ft. Opening.

Same as at Sta. 754-40. 255.20

1112-00. County Line Merced & Fresno.

Measuring Gates on Outlet Gates:

20 ft. Opening	3 at	.....	\$117.00	351.00
14 " "	1 "	.....	68.00	68.00
10 " "	1 "	.....	57.00	57.00
8 " "	3 "	.....	50.00	150.00
5 " "	3 "	.....	33.00	99.00

Total 725.00

Total Estimated Cost \$20,945.33

Main Canal.

Length of Canal in Fresno County, 111,200 ft.=21.06 miles.
Right of Way 200 feet in width.

Sections of Canal.

37,500 ft. Base 30 ft. inside slopes	3 : 1
73,700 " " 30 " " "	2½ : 1

1400

Fresno County.

Estimated Cost of Parallel Canal.

Stop and Outlet Gates, Bridges, etc.....	\$10,932.51
Earth Excavation, 347,040 yds. @ 10¢	34,704.00
Engineering and General Superintendence, etc., 10% ..	4,563.65
Total	\$50,200.16

Right of Way.

List of Stop and Outlet Gates, Bridges, etc., on following pages:

1401

Parallel Canal.

Station 584-50. Commencement.

584-91. Outlet Gate. 10 x 24 x 6.

Lumber R W	at \$27 M ft....	4.40	\$118.80
" O P	" 27 " "	1.30	35.10
Carpenter Work	" 10 " "	5.70	57.00
Freight & Haul.	" 10 " "	do.	57.00
Earthwork, excavation & Back fill			30.00
Incidental Expenses, etc., 10%			29.79

Estimated Cost 327.69

585-56. Stop Gate. 49 x 20 x 9.

Lumber R W	at \$27 M ft....	13.30	359.10
" O P	" 27 " "	3.50	94.50
" Weirboards @	50 " "	1.30	75.00
" Battens	" 30 " "	1.40	42.00
Carpenter Work	" 10 " "	19.50	195.00
Freight & Haul.	" 9 " "	do.	175.50
Earthwork, excavation & back fill			60.00
Incidental Expenses, etc., 10%			100.10

Estimated Cost 1,101.20

599-41. Outlet Gate. 5.5 x 14 x 6.

Lumber R W	at \$27 M ft. . . .	4.00	108.00
" O P	" 27 " " . . . .	.40	10.80
Carpenter Work	" 10 " "	4.40	44.00
Freight & Haul.	" 9 " "	do.	39.60
Earthwork, excavation & back fill.			20.00
Incidental Expenses, etc., 10%			22.24

Estimated Cost	244.64
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Total forward	\$1,673.53
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Fresno Co.

1402 Parallel Canal.

Brought Forward	\$1,673.53
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621-71. Outlet Gate. 5.5 x 14 x 6.

Same as at Sta. 599-41	244.64
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642-98. Outlet Gate. 5.5 x 14 x 6.

Same as at Sta. 599-41	244.64
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671-91. Outlet Gate. 5.5 x 14 x 6.

Same as at Sta. 599-41	244.64
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685-47. Bridge. 28 x 14. Head Dos Palos Main.

Lumber R W	at \$27 M ft. . . .	2.00	\$54.00
" O P	" 27 " "	2.75	74.25
" Piles	" 27 " "	2.85	76.95
Carpenter Work	" 5 " "	7.60	38.00
Freight & Haul.	" 9 " "	do.	68.40
Driving Piles 17 @ 2.50			42.50
Earthwork			30.00
Incidental Expenses, etc., 5%			19.20

Estimated Cost	403.30
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699-96. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-41	244.64
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727-58. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-41	244.64
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740-32. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-41 244.64

755-06. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-41 244.64

762-13. Stop Gate. 40 x 24 x 9.

Lumber R W	at \$27	M ft. . . .	10.40	280.80	
" O P	" 27	" " . . .	4.20	113.40	
Totals forward	" "	" " . . .	14.60	394.20	\$3,789.31

Fresno Co.

1403

Parallel Canal.

Brought Forward		M ft. . . .	14.60	\$394.20	\$3,789.31
Lumber Weirboards @ \$50	" "	" " . . .	1.00	50.00	
" Battens " 30	" "	" " . . .	1.00	30.00	
Carpenter Work " 10	" "	" " . . .	16.60	166.00	
Freight & Haul. " 9	" "	" " . . .	do.	149.40	
Earthwork, excavation & Back fill				60.00	
Incidental Expenses, etc., 10%				86.96	

Estimated Cost 936.56

769-41. Outlet Gate. 6 x 14 x 6.

Lumber R W	at \$27	M ft. . . .	3.00	81.00
" O P	" 27	" " . . .	.40	10.80
Carpenter Work	" 10	" " . . .	3.40	34.00
Freight & Haul.	" 9	" " . . .	do.	30.60
Earthwork, excavation & back fill				25.00
Incidental Expenses, etc., 10%				18.14

Estimated Cost 199.54

783-25. Outlet Gate. 6 x 14 x 6.

Same as at Sta. 769-41 199.54

797-22. Outlet Gate. 6 x 14 x 6.

Same as at Sta. 769-41 199.54

810-32. Outlet Gate. 6 x 14 x 6.

Same as at Sta. 769-41 199.54

837-16. Outlet Gate. 6 x 14 x 6.

Same as at Sta. 769-41..... 199.54

864-65. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-41..... 244.64

878-45. Outlet Gate. 5.5 x 14 x 9.

Same as at Sta. 599-41..... 244.64

Total Forward \$6,212.85

Fresno Co.

1404 Parallel Canal.

Brought Forward \$6,212.85

892-72. Outlet Gate. 5.5 x 14 x 7.

Same as at Sta. 599-47..... 244.64

894-24. Stop Gate. 40 x 18 x 9.

Lumber R W at \$27 M ft.... 9.00 \$243.00

" O P " 27 " " ... 4.20 113.40

" Weirboards @ 50 " " ... 1.00 50.00

" Battens " 30 " " ... 1.00 30.00

Carpenter Work " 10 " " ... 15.20 152.00

Freight & Haul. " 9 " " ... do. 136.80

Earthwork, excavation & back fill 60.00

Incidental Expenses, etc., 10%..... 78.50

Estimated Cost 863.70

920-95. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-47..... 244.64

937-70. Outlet Gate. 5.5 x 14 x 4.

Same as at Sta. 599-47..... 244.64

947-67. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-47..... 244.64

960-94. Outlet Gate. 5.5 x 14 x 5.

Same as at Sta. 599-47..... 244.64

61-722

973-90. Outlet Gate 5.5 x 14 x 5.

Same as at Sta. 599-47..... 244.64

1001-88. Outlet Gate. 5 x 10 x 5.

Lumber R W	at \$27	M ft....	4.00	108.00
" O P	" 27	" "....	.50	13.50
Carpenter Work	" 10	" "....	4.50	45.00
Totals forward	" "	" "....	4.50	\$166.50
				\$8,544.39

Fresno Co.

1405

Parallel Canal.

Brought Forward	M ft....	4.50	\$166.50	\$8,544.39
Freight & Haul. at \$10	" "	.....	45.00	
Earthwork, excavation & Back fill			30.00	
Incidental Expenses, etc., 10%			24.15	

Estimated Cost 265.65

1015-55. Outlet Gate. 5 x 18 x 5.

Lumber R W	at \$27	M ft....	1.70	45.90
" O P	" 27	" "....	.30	7.10
Carpenter Work	" 10	" "....	2.00	20.00
Freight & Haul.	" 10	" "....	do.	20.00
Earthwork, excavation & back fill				20.00
Incidental Expenses, etc., 10%				11.30

Estimated Cost 124.30

1029-40. Bridge. 67 x 14.

Lumber R W	at \$27	M ft....	1.28	34.56
" O P	" 27	" "....	4.32	116.64
Carpenter Work	" 5	" "....	5.60	28.00
Freight & Haul.	" 10	" "....	do.	56.00
Earthwork, excavation & Back fill				25.00
Incidental Expenses, etc., 10%				26.02

Estimated Cost 286.22

1039-00. Outlet Gate. 5 x 10 x 4.

Same as at Sta. 1001-88..... 265.65

1056-07. Outlet Gate. 5 x 10 x 4.

Same as at Sta. 1001-88 265.65

1083-52. Outlet Gate. 5 x 10 x 4.

Same as at Sta. 1001-88. 265.65

Total forward \$10,017.51

Fresno Co.

1406 Parallel Canal.

Brought Forward \$10,017.51

1122-00. County Line, Merced & Fresno.

Measuring Gates on Outlet Gates:

10 ft. Opening	1	@	\$57.00	57.00
5 " "	26	"	33.00	858.00

Total 915.00

Total Estimated Cost \$10,932.51

Parallel Canal.

Length of Canal in Fresno County 53,750 ft. = 10.18 miles.

Sections of Canal.

40,000 ft. Base	25 ft. inside slopes	3:1	Average cut	4.70 ft.
13,750 " "	30 " "	3:1	" "	3.60 "

1407 Fresno County.

Estimated Cost of Dos Palos Main Canal.

Stop and Outlet Gates, Bridges, etc.		\$27,136.51
Earth Excavation	109,617 yds. @ 10¢	10,961.70
" Side Canal	8,450 " @ 7¢	591.50
Engineering and General Superintendence, etc., 10%..		3,868.97
Total		\$42,558.68

Right of way, 167 acres @ —.

List of Stop and Outlet Gates, Bridges, etc., on following pages.

1408

Dos Palos Main Canal.

Station 1-25. Head Gate. 30 x 20 x 9. Vertical.

Lumber R W	at \$27 M ft. . . .	8.78	\$237.06
" Weirboards @	50 " " . . .	.48	24.00
" Battens	" 30 " " . . .	.55	16.50
Carpenter Work	at \$10 " " . . .	9.81	98.10
Lumber Piles O P	" 27 " " . . .	6.27	169.29
Freight & Haul.	" 9 " " . . .	16.08	144.72
Pile driv. Sheet 112 @ 1.00	.....		112.00
Earthwork, excavation & Back fill	.....		33.00
Incidental Expenses, etc., bolgs., 10%	.....		83.46

Estimated Cost 918.13

2.45. Stop Gate. 30 x 18 x 9 ft.

Lumber R W	at \$27 M ft. . . .	10.05	271.35
" O P	" 27 " " . . .	.48	12.96
" Weirboards @	50 " " . . .	.66	33.00
" Battens	" 30 " " . . .	.55	16.50
Carpenter Work	" 10 " " . . .	11.74	117.40
Lumber Piles O P	" 27 " " . . .	6.72	181.44
Freight & Haul.	" 9 " " . . .	18.46	166.14
Piles Driv. Sheet 112 at 1.00	.....		112.00
Earthwork, excavation & back fill	.....		31.00
Incidental Expenses, bolts, etc., 10%	.....		94.17

Estimated Cost 1,035.96

17-29. Stop Gate. 30 x 18 x 8 ft.

Lumber R W	at \$27 M ft. . . .	12.18	328.86
" O P	" 27 " " . . .	.48	12.96
" Weirboards @	50 " " . . .	.66	33.00
" Battens	" 30 " " . . .	.80	24.00

Totals forward " " . . . 14.12 \$398.82 \$1,954.09

Fresno Co.

1409

Dos Palos Main Canal.

Brought Forward	M ft. . . .	14.12	\$398.82	\$1,954.09
Carpenter Work	at \$10 " " . . .	do.	141.20	
Freight & Haul.	" 9 " " . . .	do.	127.08	
Earthwork, excavation & back fill	.....		61.00	
Incidental Expenses, bolts, etc., etc., 10%	.....		72.81	

Estimated Cost 800.91

46-61. Stop Gate. 30 x 20 x 8 ft. Vertical.

Lumber R W	at \$27 M ft....	10.91	294.57
" Weirboards @	50 " " ....	.48	24.00
" Battens	" 30 " " ....	.80	24.00
Carpenter Work	" 10 " "	12.19	121.90
Freight & Haul.	" 9 " "	do.	109.71
Earthwork, excavation & back fill.....			63.00
Incidental Expenses, Bolts, etc., 10%.....			63.71

Estimated Cost 700.89

Pipe Box. 12 x 4 x 100 ft.

Lumber R W	at \$27 M ft....	14.00	378.00
" Battens	" 30 " " ....	.60	18.00
Carpenter Work	" 10 " "	14.60	146.00
Freight & Haul.	" 9 " "	do.	131.40
Earthwork, excavation & back fill.....			50.00
Incidental Expenses, Bolts, etc., 10%.....			72.34

Estimated Cost 795.74

74-30. Outlet Box. 4 x 3 x 22 ft. Right.

Lumber R W	at \$27 M ft....	1.50	40.50
Carpenter Work	" 10 " "	do.	15.00
Freight & Haul.	" 9 " "	do.	13.50
Earthwork, excavation & back fill.....			6.00

Totals forward \$75.00 \$4,251.63
Fresno Co.

1410 Dos Palos Main Canal.

Brought Forward	\$75.00	\$4,251.63
Incidental Expenses, Bolts, etc., 10%.....	7.50	82.50

Estimated Cost

74-75. Outlet Gate. 16 x 16 x 7. Left.

Lumber R W	at \$27 M ft....	6.70	180.90
" O P	" 27 " "	1.00	27.00
" Weirboards	" 50 " " ....	.11	5.50
" Battens	" 30 " " ....	.50	15.00
Carpenter Work	" 10 " "	8.31	83.10
Freight & Haul.	" 9 " "	do.	74.80
Earthwork, excavation & back fill.....			37.00
Incidental Expenses, etc., 10%.....			42.33

Estimated Cost 465.63

74-87. Stop Gate. 40 x 18 x 8.

Lumber R W	at \$27	M ft. . . .	10.26	277.02
" O P	" 27	" " . . .	.34	9.18
" Weirboards	" 50	" " . . .	.80	40.00
" Battens	" 30	" " . . .	.80	24.00
Carpenter Work	" 10	" " . . .	12.20	122.00
Freight & Haul.	" 9	" " . . .	do.	109.80
Earthwork, excavation & back fill.				67.00
Incidental Expenses, Bolts, etc., 10%				64.90

Estimated Cost 713.90

94-73. Outlet Box. 4 x 3 x 16. Left.

Same as at Sta. 74-30. 82.50

94-88. Bridge. 32 x 16 ft.

Lumber R W	at \$27	M ft. . . .	1.38	37.26
" O P	" 27	" " . . .	2.79	75.23
Carpenter Work	" 5	" " . . .	4.17	20.85

Totals forward " " . . . 4.17 \$133.34 \$5,596.16

Fresno Co.

1411 Dos Palos Main Canal.

Brought Forward	M ft. . . .	4.17	\$133.34	\$5,596.16
Freight & Haul.	\$9 " " . . .	do.	37.53	
Earthwork			13.00	
Incidental Expenses, etc., 5%			9.19	

Estimated Cost 193.06

95-10. Outlet Box. 4 x 3 x 16. Right.

Same as at Sta. 74-30. 82.50

98-25. Pipe Box. 4 x 5 x 160.

Estimated 550.00

116-81. Outlet Box. 4 x 3 x 16. Right.

Same as at Sta. 74-30. 82.50

132-10. Pipe Box. 6 x 3 x 100.

Estimated 500.00

134-56. Waste Gate. 24 x 20 x 8. Right.

Lumber R W	at \$27	M ft....	9.90	167.30
" O P	" 27	" "....	1.20	32.40
" Weirboards	" 50	" "....	.40	20.00
" Battens	" 30	" "....	.60	18.00
Carpenter Work	" 10	" "....	12.10	121.00
Freight & Haul.	" 9	" "....	do.	108.90
Earthwork, excavation & back fill.....				60.00
Incidental Expenses, etc., 10%.....				52.76

Estimated Cost 580.36

143-89. Outlet Gate. 6 x 16 x 6. Right.

Lumber R W	at \$27	M ft....	3.95	106.65
" O P	" 27	" "....	.40	10.80
" Battens	" 30	" "....	.20	6.00
Carpenter Work	" 10	" "....	4.55	45.50

Totals forward " " ... 4.55 \$168.95 \$7,584.58

Fresno Co.

1412 Dos Palos Main Canal.

Brought Forward	M ft....	4.55	\$168.95	\$7,584.58
Freight & Haul.	at — " "....	do.	40.95	
Earthwork, excavation & back fill			25.00	
Incidental Expenses, etc., 10%.....			23.49	

Estimated Cost 258.39

148-30. Outlet Gate. 8 x 16 x 5. Left.

Lumber R W	at \$27	M ft....	4.28	115.56
" O P	" 27	" "....	.50	13.50
" Battens	" 30	" "....	.22	6.60
Carpenter Work	" 10	" "....	5.00	50.00
Freight & Haul.	" 9	" "....	do.	45.00
Earthwork, excavation & back fill.....				28.00
Incidental Expenses, etc., 10%.....				25.86

Estimated Cost 284.52

149-20. Stop Gate. 44 x 20 x 6.

Lumber R W	at \$27	M ft....	10.28	277.02
" O P	" 27	" "....	.34	9.18
" Weirboards	" 50	" "....	.80	40.00
" Battens	" 30	" "....	.80	24.00
Carpenter Work	" 10	" "....	12.20	122.00
Freight & Haul.	" 9	" "....	do.	109.80
Earthwork, excavation & back fill.....				67.00
Incidental Expenses, etc., 10%.....				64.90

Estimated Cost 713.90

198-60. Pipe Box. 4 x 1 x 100 ft.

Estimated	400.00
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213-34. Outlet Gate. 12 x 18 x 5. Left.

Lumber R W	at \$27 M ft.	4.67	126.09	
Totals forward	" " ...	4.67	\$126.09	\$9,241.39

Fresno Co.

1413

Dos Palos Main Canal.

Brought Forward	M ft.	4.67	\$126.09	\$9,241.39
Lumber O P	at \$27 " " ...	.80	21.60	
" Battens	" 30 " " ...	.40	12.00	
Carpenter Work	" 10 " " ...	5.87	58.70	
Freight & Haul.	" 9 " " ...	do.	52.83	
Earthwork, excavation & back fill.....			30.00	
Incidental Expenses, etc., 10%.....			30.12	

Estimated Cost	331.34
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217-15. Bridge. 40 x 16.

Lumber R W	at \$27 M ft.	2.13	57.31
" O P	" 27 " " ...	3.22	86.94
Carpenter Work	" 5 " " ...	5.35	26.75
Freight & Haul.	" 9 " " ...	do.	48.15
Earthwork			15.00
Incidental Expenses, etc., 5%.....			11.71

Estimated Cost	246.06
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224-87. Outlet Gate. 8 x 20 x 4.

Same as at Sta. 148-30.....	284.52
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232-56. Pipe Box. 12 x 2 x 100.

Estimated	700.00
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236-32. Outlet Box. 4 x 3 x 18. Right.

Same as at Sta. 74-30.....	82.50
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255-51. Outlet Gate. 8 x 20 x 6. Left.

Same as at Stat. 148-30.....	284.52
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255-72. Outlet Gate. 8 x 20 x 5. Right.

Same as at Sta. 148-30..... 284.52

271-89. Outlet Gate. 12 x 18 x 5. Right.

Same as at Sta. 213-34..... 331.34

Total forward \$11,786.19

Fresno Co.

1414 Dos Palos Main Canal.

Brought Forward \$11,786.19

272-46. Outlet Gate. 8 x 20 x 4. Left.

Same as at Sta. 148-30..... 284.52

272-88. Stop Gate. 38 x 20 x 6 ft.

Same as at Sta. 74-87..... 713.90

283-88. Outlet Gate. 8 x 20 x 6. Right.

Same as at Sta. 148-30..... 284.52

293-40. Outlet Gate. 8 x 16 x 6. Right.

Same as at Sta. 148-30..... 284.52

293-78. Bridge. 40 x 16.

Same as at Sta. 217-15..... 246.06

308-45. Head Gate. 20 x 16 x 7. East Branch Canal.

Lumber	R W	at \$27	M Ft...	10.20	\$275.40
"	O P	" 27	" " ...	1.00	27.00
"	Weirboards	" 50	" " ...	.52	26.00
"	Battens	" 30	" " ...	.65	19.50
Carpenter Work	" 10	" " ...	12.37	123.70	
Freight & Haul.	" 9	" " ...	do.	111.35	
Earthwork				45.00	
Incidental Expenses, etc., 10%				62.79	

Estimated Cost 690.74

308-50. Outlet Gate. 8 x 10 x 7. Left.

Same as at Sta. 148-30..... 284.52

309-10. Outlet Gate. 3 x 16 x 6. Right.

Estimated 50.00

309-35. Stop Gate. 30 x 20 x 5.

Same as at Sta. 74-87..... 713.90

326-25. Outlet Gate. 3 x 20 x 6. Right.

Estimated 50.00

Total forward \$15,388.87

Fresno Co.

1415

Dos Palos Main Canal.

Brought Forward \$15,388.87

348-86. Outlet Gate. 4 x 20 x 6. Right.

Lumber	at \$27 M ft....	0.80	21.60
Carpenter Work	" 10 " "....	do.	8.00
Freight & Haul.	" 9 " "....	do.	7.20
Earthwork	.....		13.00
Incidental Expenses, etc., 10%	.....		5.20

Estimated Cost \$55.00

355-90. Outlet Gate. 4 x 20 x 6. Left.

Same as at Sta. 348-86..... 55.00

359-75. Head Gate. 18 x 24 x 6. West Branch Canal.

Same as at Sta. 308-45..... 690.74

360-000. Outlet Gate. 5 x 8 x 4. Right.

Estimated 50.00

362-04. Stop Gate. 36 x 24 x 5.

Same as at Sta. 74-87..... 713.90

370-16. Outlet Gate. 6 x 20 x 6. Left.

Same as at Sta. 143-89..... 258.59

387-00. Outlet Gate. 4 x 20 x 4. Left.

Same as at Sta. 348-86..... 55.00

388-00. Pipe Box. 12 x 4 x 150.

Estimated 1,000.00

388-30. Outlet Gate. 4 x 20 x 4. Right.

Same as at Sta. 348-86..... 55.00

389-36. Bridge. 90 x 16.

Lumber R W	at \$27	M ft....	2.38	64.26
" O P	" 27	" " ...	8.20	221.40
Carpenter Work	" 5	" " ...	10.58	52.90
Freight & Haul.	" 9	" " ...	do.	95.21

Totals forward \$433.77 \$18,321.90

Fresno Co.

1416 Dos Palos Main Canal.

Brought Forward \$433.77 \$18,321.90

Earthwork 15.00

Incidental Expenses, etc., 5%..... 22.43

Estimated Cost 471.20

390-00. Outlet Gate. 4 x 20 x 6. Right.

Lumber R W	at \$27	M ft....	3.63	98.01
" O P	" 27	" " ...	.37	9.99
" Battens	" 30	" " ...	.20	6.00
Carpenter Work	" 10	" " ...	4.20	42.00
Freight & Haul.	" 9	" " ...	do.	37.80
Earthwork				26.00
Incidental Expenses, etc., 10%				21.98

Estimated Cost 241.78

396-70. Outlet Gate. 4 x 20 x 6. Left.

Same as at Sta. 390-00..... 241.78

398-00. Outlet Gate. 4 x 20 x 6. Right.

Same as at Sta. 390-00..... 241.78

402-00. Head Gate. 24 x 22 x 6. Branch No. 1.

Lumber R W	at \$27 M ft. . . .	8.24	222.48
" O P	" 27 " " . . .	1.80	48.60
" Weirboards	" 50 " " . . .	.30	15.00
" Battens	" 30 " " . . .	.60	18.00
Carpenter Work	" 10 " " . . .	10.94	109.40
Freight & Haul.	" 9 " " . . .	do.	98.46
Earthwork			47.00
Incidental Expenses, etc., 10%			55.89

Estimated Cost	614.83
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403-71. Outlet Box. 2 x 4 x 16. Right.

Same as at Sta. 74-30.	82.50
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Total forward	\$20,215.77
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Fresno Co.

1417 Dos Palos Main Canal.

Brought Forward	\$20,215.77
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403-88. Stop Gate. 38 x 20 x 6.

Same as at Sta. 74-87.	713.90
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404-55. Outlet Gate. 3 x 20 x 4. Right.

Same as at Sta. 348-86.	55.00
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409-14. Outlet Gate. 4 x 20 x 4. Left.

Same as at Sta. 348-86.	55.00
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415-64. Outlet Gate. 11½ x 20 x 4. Right.

Lumber	at \$27 M ft. . . .	0.60	16.20
Carpenter Work	" 10 " " . . .	do.	6.00
Freight & Haul.	" 9 " " . . .	do.	5.40
Earthwork			10.00
Incidental Expenses, etc., 10%			3.40

Estimated Cost	41.00
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418-86. Outlet Gate. 3 x 20 x 4. Left.

Same as at Sta. 348-86.	55.00
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421-80. Outlet Gate. 3 x 20 x 4. Right.

Same as at Sta. 348-86.	55.00
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426-89. Bridge. 128 x 16.

Lumber R W	at \$27 M ft....	5.07	35.49
" O P	" 27 " " ...	11.93	322.11
Carpenter Work	" 5 " " ...	17.00	85.00
Freight & Haul.	" 9 " " ...	do.	153.00
Earthwork		17.00
Incidental Expenses, etc., 5%		30.63

Estimated Cost	643.23
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426-95. Outlet Gate. 6 x 20 x 4. Left.

Same as at Sta. 143-89.....	258.39
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Total forward	\$22,092.29
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Fresno Co.

1418 Dos Palos Main Canal.

Brought Forward	\$22,092.29
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429-14. Bridge. 40 x 24.

Lumber R W	at \$27 M ft....	2.36	63.72
" O P	" 27 " " ...	4.69	126.63
Carpenter Work	" 5 " " ...	7.05	35.25
Freight & Haul.	" 9 " " ...	do.	63.45
Earthwork		20.00
Incidental Expenses, etc., 5%		15.45

Estimated Cost	324.50
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429-52. Outlet Gate. 4 x 28 x 5. Right.

Same as at Sta. 390-00.....	241.78
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429-52. Outlet Gate. 4 x 28 x 5. Left.

Same as at Sta. 390-00.....	241.78
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433-40. Outlet Gate. 12 x 16 x 5. Right.

Same as at Sta. 213-34.....	331.34
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433-40. Outlet Gate. 4 x 24 x 5. Left.

Same as at Sta. 390-00.....	241.78
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433-78. Stop Gate. 38 x 20 x 6.

Same as at Sta. 74-87	713.90
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438-36. Outlet Gate. 4 x 20 x 4. Left.	
Same as at Sta. 348-86.....	55.00
438-40. Outlet Gate. 8 x 16 x 6. Right.	
Same as at Sta. 148-30.....	284.52
448-78. Outlet Gate. 2 x 20 x 4. Right.	
Same as at Sta. 415-64.....	41.00
451-15. Outlet Gate. 4 x 20 x 5. Left.	
Same as at Sta. 390-00.....	241.78
455-40. Outlet Gate. 2 x 20 x 4. Left.	
Same as at Sta. 415-64.....	41.00
Total forward	<u>\$24,850.67</u>
Fresno Co.	

1419	Dos Palos Main Canal.	
Brought Forward		\$24,850.67
455-80. Outlet Gate. 4 x 18 x 5. Right.		
Same as at Sta. 390-00.....		241.78
459-54. Outlet Gate. 4 x 18 x 5. Left.		
Same as at Sta. 390-00.....		241.78
462-33. Outlet Gate. 4 x 18 x 5. Left.		
Same as at Sta. 390-00.....		241.78
466-45. Bridge. 40 x 24.		
Same as at Sta. 429-14.....		324.50
467-00. County Line, Merced & Fresno.		

Measuring Gates on Old Outlet Gates:

17- 4 ft. Openings @	20.00	340.00
3- 6 " " "	22.50	67.50
8- 8 " " "	25.00	200.00
3-12 " " "	62.50	187.50
1-16 " " "	90.00	90.00
3-20 " " "	117.00	351.00
Total		<u>1,236.00</u>
Total Estimated Cost		<u>\$27,136.51</u>

Dos Palos Main Canal.

Length of Canal in Fresno County 46,700 ft. 8.84 Miles.
Right of way 156 ft. in width.

Sections of Canal.

9,000 ft. base	25 ft. inside slopes	2 : 1	Average cut	2 : 0 ft.
16,000 " " 40 " " "	2 1/2 : 1	" "	1 : 7	
21,700 " " 35 " " "	2 : 1	" "	1 : 5	

Side Canal 16,900 ft. 6 ft. base 2 : 1 slopes. Cut 1 : 5 ft.

Fresno Co.

1420

Fresno County.

Estimated Cost of Dos Palos Branch Canal No. 1.

Stop and Outlet Gate, Bridges, etc.....	\$7,342.50
Earth Excavation 38,787 yds. @ 8¢.....	3,102.96
Engineering and General Superintendence, etc., 10%..	1,044.54
Total	\$11,490.00

Right of way 41.6 acres @ —.

List of Stop and Outlet Gates, Bridges, etc., on following pages.

1421

Dos Palos Branch Canal No. 1.

Station 6-00. Station 402-00. Main Canal.

0-75. Outlet Gate. 8 x 20 x 5. Right.

Estimated	\$375.00
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5-00. Outlet Gate. 4 x 14 x 4. Left.

Lumber R W	at \$27 M ft....	1.00	\$27.00
" O P	" 27 " "30	8.10
Carpenter Work	" 10 " " ...	1.30	13.00
Freight & Haul.	" 9 " " ...	do.	11.70
Earthwork, excavation & back fill.....			20.00
Incidental Expenses, etc., 10%.....			7.98

Incidental Expenses, etc., 10%.....	7.98
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6-85. Outlet Gate. 4 x 12 x 4. Right.

Lumber R W	at \$27 M ft....	1.00	27.00
Carpenter Work	" 10 " " ...	do.	10.00
Freight & Haul.	" 9 " " ...	do.	9.00
Earthwork, excavation & back fill.....			20.00
Incidental Expenses, etc., 10%.....			6.60

Estimated Cost	72.60
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11-5. Outlet Gate. 4 x 16 x 4. Right.	
Same as at Sta. 6-85.....	72.60
14-60. Outlet Gate. 3 x 14 x 4. Left.	
Same as at Sta. 6-85.....	72.60
14-89. Outlet Gate. 3 x 14 x 4. Right.	
Same as at Sta. 6-85.....	72.60
17-73. Outlet Gate. 4 x 12 x 4. Right.	
Same as at Sta. 6-85.....	72.60
18-15. Outlet Gate. 4 x 14 x 4. Left.	
Same as at Sta. 5-00.....	87.78
Total forward	<u>\$913.56</u>

Fresno.

1422 Dos Palos Branch Canal No. 1.

Brought Forward	\$913.56
21-45. Outlet Gate. 4 x 16 x 4. Left.	
Same as at Sta. 5-00.....	87.78
24-72. Outlet Gate. 3 x 12 x 4. Right.	
Same as at Sta. 6-85.....	72.60
28-36. Outlet Gate. 3 x 12 x 4. Right.	
Same as at Sta. 6-85.....	72.60
31-83. Outlet Gate. 3 x 12 x 4. Left.	
Same as at Sta. 5-00.....	87.78
34-20. Outlet Gate. 4 x 8 x 4. Left.	
Same as at Sta. 6-85.....	72.60

34-79. Stop Gate. 24 x 16 x 7.

Lumber R W	at \$27 M ft. . . .	9.00	\$243.00
" Weirboards	" 50 " " . . .	.40	20.00
" Battens	" 30 " " . . .	.60	18.00
Carpenter Work	" 10 " " . . .	10.00	100.00
Freight & Haul.	" 9 " " . . .	do.	90.00
Earthwork, excavation & back fill.....			58.00
Incidental Expenses, etc., 10%.....			<u>52.90</u>

Estimated Cost 581.90

35-60. Outlet Gate. 2 x 20 x 3. Left.

Lumber	at \$27 M ft....	0.60	16.20
Carpenter Work	" 10 " " ... do.		6.00
Freight & Haul.	" 9 " "		5.40
Earthwork		10.00
Incidental Expenses, etc., 10%		3.40

Estimated Cost	41.00
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41-07. Outlet Gate. 4 x 14 x 4. Right.

Same as at Sta. 5-00.....	87.78
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Total forward	\$2,017.60
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Fresno Co.

1423 Dos Palos Branch Canal No. 1.

Brought Forward	\$2,017.60
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47-42. Bridge. 20 x 16.

Lumber R W	at \$27 M ft....	1.77	47.79
" O P	" 27 " " ...	2.33	62.91
Carpenter Work	" 5 " " ...	4.10	20.50
Freight & Haul.	" 9 " " ... do.		36.90
Earthwork, bank & approaches.....			15.00
Incidental Expenses, etc., 5%		9.15

Estimated Cost	192.25
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47-63. Outlet Gate. 4 x 8 x 4. Left.

Same as at Sta. 6-85.....	72.60
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47-63. Outlet Gate. 4 x 12 x 3. Right.

Same as at Sta. 6-85.....	72.60
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49-86. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 35-60.....	41.00
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54-03. Outlet Gate. 3 x 14 x 3. Right.

Same as at Sta. 5-00.....	87.78
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54-10. Outlet Gate. 3 x 30 x 3. Left.

Estimated	\$125.00
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57-51. Bridge. 18 x 12.

Lumber R W	at \$27 M ft. . . .	1.77	47.79
" O P	" 27 " " . . .	1.48	39.96
Carpenter Work	" 5 " " . . .	3.25	16.25
Freight & Haul.	" 9 " " . . .	do.	29.25
Earthwork, bank & approaches			15.00
Incidental Expenses, etc., 5%			7.41

Estimated Cost	155.66
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58-21. Outlet Gate. 4 x 14 x 5. Right.

Same as at Sta. 6-85	72.60
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Total forward	\$2,837.09
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Fresno Co.

1424 Dos Palos Branch Canal No. 1.

Brought Forward	\$2,837.09
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58-64. Outlet Gate. 2 x 24 x 3. Right.

Same as at Sta. 35-60	41.00
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60-60. Outlet Gate. 4 x 8 x 4. Right.

Same as at Sta. 6-85	72.60
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63-93. Outlet Gate. 4 x 6 x 3. Left.

Same as at Sta. 6-85	72.60
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66-05. Outlet Gate. 3 x 14 x 4. Right.

Same as at Sta. 5-00	87.78
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73-63. Bridge. 24 x 16.

Same as at Sta. 47-42	192.25
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73-89. Outlet Gate. 4 x 8 x 4. Left.

Same as at Sta. 6-85	72.60
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73-89. Outlet Gate. 4 x 8 x 4. Right.

Same as at Sta. 6-85	72.60
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78-48. Outlet Gate. 3 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

83-32. Outlet Gate. 3 x 12 x 4. Right.

Same as at Sta. 5-85..... 72.60

86-55. Outlet Gate. 4 x 12 x 5. Left.

Same as at Sta. 6-85..... 72.60

86-70. Head Gate. 16 x 16 x 7. Branch No. 2.

Lumber R W	at \$27 M ft. . . .	7.20	194.40
" Weirboards	" 50 " " . . .	.32	17.50
" Battens	" 30 " " . . .	.45	13.50
Carpenter Work	" 10 " " . . .	8.00	80.00
Freight & Haul.	" 9 " " . . .	do.	72.00
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			40.74

Estimated Cost 448.14

Total Forward \$4,114.46

Fresno Co.

1425 Dos Palos Branch Canal No. 1.

Brought Forward \$4,114.46

87-30. Stop Gate. 24 x 16 x 7.

Same as at Sta. 34-79..... 581.90

98-81. Bridge 24 x 16.

Same as at Sta. 47-42..... 192.25

100-07. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

106-40. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

112-98. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

118-82. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

118-96. Outlet Gate. 8 x 18 x 6. Left.

Lumber R W	at \$27	M ft....	4.30	116.10
" O P	" 27	" " ...	.50	13.50
" Battens	" 30	" " ...	.20	6.00
Carpenter Work	" 10	" " ...	4.90	49.00
Freight & Haul.	" 9	" " ...	do.	44.10
Earthwork, excavation & back fill.....				30.00
Incidental Expenses, etc., 10%.....				25.87

Estimated Cost \$284.57

119-90. Stop Gate. 24 x 16 x 6.

Same as at Sta. 34-79..... 581.90

125-65. Outlet Gate. 8 x 18 x 6. Left.

Same as at Sta. 118-96..... 284.57

125-90. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

Total forward \$6,402.65

Fresno Co.

1426 Dos Palos Branch Canal No. 1.

Brought Forward \$6,402.65

126-40. Bridge. 24 x 16.

Same as at Sta. 47-42..... 192.25

139-08. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 6-85..... 72.60

145-00. County Line Merced & Fresno.

Measuring Gates on Old Outlet Gates.

30-4 ft. Opening @	\$20.00.....	600.00
3-8 " " "	25.00.....	75.00

Estimated Cost 675.00

Total Estimated Cost..... \$7,342.50

Dos Palos Branch Canal No. 1.

Length of Canal in Fresno County 14,500 feet, 2.75 miles.

Right of way 125 feet in width.

Canal Section.

Base 20 ft. inside slopes, $2\frac{1}{2}$: 1 cut 2.7 ft.

Fresno Co.

1427

Fresno County.

Estimated Cost of Dos Palos Branch Canal No. 2.

Stop and outlet gates, bridges, etc.....	\$3,167.04
Earth excavation 14,124 yds. @ 8¢.....	1,129.92
Engineering and general superintendence 10%.....	429.69
Total.....	\$4,726.65

Right of way, 13.8 acres @ ———.

List of stop and outlet gates, bridges, etc., on following pages.

1428

Dos Palos Branch Canal No. 2.

Station 0+00. Station 86+70. Branch No. 1.

1-65. Outlet Gate. 4 x 14 x 4. Left.

Lumber R W	at \$27 M ft....	1.00	27.00
Carpenter Work	" 10 " "....	do.	10.00
Freight & Haul.	" 9 " "....	do.	9.00
Earthwork, excavation & back fill.....			20.00
Incidental Expenses, etc., 10%.....			6.60

Estimated Cost 72.60

1-65. Outlet Gate. 4 x 14 x 4 Right.

Same as at Sta. 1-65 72.60

5-83. Outlet Gate. 4 x 20 x 4. Left.

Lumber	at \$27 M ft....	0.80	21.60
Carpenter Work	" 10 " "....	do.	8.00
Freight & Haul.	" 9 " "....	do.	7.20
Earthwork			13.00
Incidental Expenses, etc., 10%.....			5.20

Estimated Cost 55.00

9-60. Outlet Gate. 4 x 20 x 4. Left.	
Same as at Sta. 5-83.....	55 00
11-00. Outlet Gate. 2 x 4 x 3. Right.	
Estimated	20.00
12-47. Outlet Gate. 2 x 4 x 3. Right.	
Estimated	20.00
14-69. Outlet Gate. 4 x 14 x 4. Left.	
Same as at Sta. 1-65.....	72.60
14-69. Outlet Gate. 4 x 14 x 4. Right.	
Same as at Sta. 1-65.....	72.60
18-80. Outlet Gate. 2 x 8 x 4. Right.	
Estimated	30.00
Total forward	<u>\$470.40</u>
Fresno Co.	

1429 Dos Palos Branch Canal No. 2.

Brought Forward	\$470.40
19-00. Outlet Gate. 6 x 18 x 4. Right.	
Lumber R W at \$27 M ft....	3.42 90.34
" O P " 27 " " ....	.38 10.26
Carpenter Work " 10 " "	3.80 38.00
Freight & Haul. " 9 " "	do. 34.20
Earthwork, excavation & back fill	30.00
Incidental Expenses, etc., 10%	20.28
Estimated Cost	<u>223.08</u>

19-30. Stop Gate. 16 x 16 x 6.

Lumber R W at \$27 M ft....	7.20 194.40
" Weirboards " 50 " " ....	.35 17.50
" Battens " 30 " " ....	.45 13.50
Carpenter Work " 10 " "	8.00 80.00
Freight & Haul. " 9 " "	do. 72.00
Earthwork, excavation & back fill	48.00
Incidental Expenses, etc., 10%	42.54
Estimated Cost	<u>467.94</u>

26-56. Outlet Gate. 2 x 8 x 2. Right.

Estimated	30.00
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31-40. Outlet Gate. 2 x 20 x 4. Left.

Lumber	at \$27 M ft....	0.60	16.20
Carpenter Work	" 10 " " ...	do.	6.00
Freight & Haul.	" 9 " " ...	do.	5.40
Earthwork			10.00
Incidental Expenses, etc., 10%.....			3.40

Estimated Cost	41.00
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Total forward	\$1,232.42
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Fresno Co.

1430 Dos Palos Branch Canal No. 2.

Brought Forward	\$1,232.42
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32-12. Bridge. 16 x 16.

Lumber R W	at \$27 M ft....	1.52	41.04
" O P	" 27 " " ...	1.53	41.31
Carpenter Work	" 5 " " ...	3.05	15.25
Freight & Haul.	" 9 " " ...	do.	27.45
Earthwork, bank & approaches.....			15.00
Incidental Expenses, etc., 5%.....			7.00

Estimated Cost	147.05
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32-30. Outlet Gate. 4 x 16 x 4. Left.

Lumber R W	at \$27 M ft....	1.00	27.00
" O P	" 27 " "30	8.10
Carpenter Work	" 10 " " ...	1.30	13.00
Freight & Haul.	" 9 " " ...	do.	11.70
Earthwork, excavation & back fill.....			20.00
Incidental Expenses, etc., 10%.....			7.98

Estimated Cost	87.78
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32-30. Outlet Gate. 8 x 12 x 4. Left.

Lumber R W	at \$27 M ft....	4.00	108.00
" Battens	" 30 " "20	6.00
Carpenter Work	" 10 " " ...	4.20	42.00
Freight & Haul.	" 9 " " ...	do.	37.80
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			22.38

Estimated Cost	246.18
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34-86. Outlet Gate. 2 x 8 x 3. Right.

Estimated 30.00

35-06. Stop Gate. 16 x 16 x 6.

Same as at Sta. 19-30 467.94

Total forward \$2,211.37

Fresno Co.

1431 Dos Palos Branch Canal No. 2.

Brought Forward \$2,211.37

36-70. Outlet Gate. 4 x 12 x 4. Left.

Same as at Sta. 32-30. 87.78

40-88. Outlet Gate. 4 x 20 x 4. Right.

Estimated 100.00

41-90. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 5-83. 55.00

45-10. Outlet Gate. 3 x 20 x 4. Left.

Same as at Sta. 5-83 55.00

45-20. Bridge. 16 x 16.

Same as at Sta. 32-12. 147.05

47-89. Outlet Gate. 4 x 16 x 4. Right.

Same as at Sta. 32-30. 87.78

49-13. Outlet Gate. 4 x 16 x 4. Left.

Same as at Sta. 32-30. 87.78

51-89. Outlet Gate. 4 x 16 x 4. Left.

Same as at Sta. 32-30. 87.78

Measuring Gates on Old Outlet Gates.

52-80. County Line, Merced & Fresno.

10-4 ft. Openings @ \$20.00 200.00

1-6 " " " 22.50 22.50

1-8 " " " 25.00 25.00

Total 247.50

Total Estimated Cost. \$3,167.04

Dos Palos Branch Canal No. 2.

Length of Canal in Fresno County 5,280 ft. 1 mile.
Right of way 114 feet in width.

Section of Canal.

20 ft. base inside slopes $2\frac{1}{2}$: 1 cut 2.7 ft.

Fresno Co.

1432

Fresno County.

Estimated Cost of Outside Canal.

Stop Gates, Outlet Gates, Bridges, etc.....		\$15,827.57
Earth Excavation 532,400 yds. @ 10¢..		53,240.00
" " Side Canal 80,000 " " 7¢..		5,600.00
Engineering and General Superintendence 10%.....		7,466.73
Total		<u>\$82,134.10</u>

Right of way 459 acres @ —.

List of Stop and Outlet Gates, Bridges, etc. on following pages.

1433

Outside Canal.

Station 0—00. Head Gate. 60 x 16 x 7 ft. deep.

Lumber R W	at \$27 M ft....	14.06	\$379.62
" O P	" 27 " " ...	.44	11.88
" Weirboards	" 50 " " ...	.96	48.00
" Battens	" 30 " " ...	1.00	30.00
Carpenter Work	" 10 " " ...	16.46	164.60
Lumber Piles O P	" 27 " " ...	2.60	70.20
Freight & Haul.	" 10 " " ...	19.06	190.60
Pile Driv. Sheet 840 @ 1.00.....			840.00
Earthwork, excavation & Back fill.....			70.00
Incidental Expenses, bolts, etc., 10%.....			<u>180.49</u>

Estimated Cost \$1,985.39

191—47. Outlet Gate. 10 x 18 x 6 ft. deep.

Lumber R W	at \$27 M ft....	5.13	138.51
" O P	" 27 " " ...	.72	19.44
" Weirboards	" 50 " " ...	.18	9.00
" Battens	" 30 " " ...	.40	12.00
Carpenter Work	" 10 " " ...	6.43	64.30
Freight & Haul.	" 9 " " ...	do.	57.87
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, Bolts, etc., 10%.....			<u>33.11</u>

Estimated Cost 364.23

245-58. Bridge. 108 x 18.

Lumber R W	at \$27 M ft. . . .	4.00	108.00	
" O P	" 27 " " . . .	9.50	256.50	
Carpenter Work	" 5 " " . . .	13.50	67.50	
Freight & Haul.	" 9 " " . . .	do.	121.50	
Earthwork, Trenching & Approaches.			15.00	
Totals forward			\$568.50	\$2,349.62

Fresno Co.

1434

Outside Canal.

Brought Forward	\$568.50	\$2,349.62
Incidental Expenses, etc., 5%	28.42	
Estimated Cost		596.92

245-58. Bridge. 20 x 8. Side Canal.

Lumber R W	at \$27 M ft. . . .	.50	13.50	
" O P	" 27 " " . . .	.50	13.50	
Carpenter Work	" 5 " " . . .	1.00	5.00	
Freight & Haul.	" 9 " " . . .	do.	9.00	
Earthwork Approaches			2.00	
Incidental Expenses, etc., 5%			2.15	
Estimated Cost				45.15

266-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Lumber R W	at \$27 M ft. . . .	2.67	72.09	
Carpenter Work	" 10 " " . . .	do.	26.70	
Freight & Haul.	" 9 " " . . .	do.	24.03	
Earthwork, excavation & back fill.			14.00	
Incidental Expenses, etc., 10%			13.68	
Estimated Cost				150.50

267-66. Outlet Gate. 12 x 18 x 6 ft.

Same as at Sta. 191-47.		364.23
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269-37. Stop Gate. 60 x 14 x 6 ft.

Lumber R W	at \$27 M ft. . . .	14.06	379.62	
" O P	" 27 " "44	11.88	
" Weirboards	" 50 " "96	48.00	
" Battens	" 30 " " . . .	1.	30.	
Carpenter Work	" 10 " " . . .	16.46	164.60	
Freight & Haul.	" 9 " " . . .	do.	148.14	
Totals forward			\$782.24	\$3,506.42

Fresno Co.

1435

Outside Canal.

Brought Forward	\$782.24	\$3,506.42
Earthwork, excavation & back fill.....	70.00	
Incidental Expenses, Bolts, etc., 10%.....	85.22	
Estimated Cost		937.46

392-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00.....	150.50
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392-87. Bridge. 80 x 24.

Lumber R W	at \$27	M ft....	3.05	82.35
" O P	" 27	" " ...	9.38	253.26
Carpenter Work	" 5	" " ...	12.43	62.15
Freight & Haul.	" 9	" " ...	do.	111.87
Earthwork, Trenching & Approaches.....				25.00
Incidental Expenses, etc., 5%.....				26.73

Estimated Cost	561.36
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392-87. Bridge. 20 x 8 ft. Side Canal.

Same as at Sta. 245-58.....	45.15
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406-43. Bridge. 80 x 16 ft. Outlet Canal No. 1.

Lumber R W	at \$27	M ft....	3.17	85.59
" O P	" 27	" " ...	6.31	170.37
Carpenter Work	" 5	" " ...	9.48	47.40
Freight & Haul.	" 9	" " ...	do.	85.32
Earthwork, trenching only.....				2.00
Incidental Expenses, etc., 5%.....				19.53

Estimated Cost	410.21
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407-50. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00.....	150.50
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407-76. Stop Gate. 60 x 12 x 6 ft.

Same as at Sta. 269-37.....	937.46
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Total forward	\$6,699.06
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Fresno Co.

1436

Outside Canal.

Brought Forward	\$6,699.06
497-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.	
Same as at Sta. 266-00.....	150.50
500-18. Outlet Gate. 10 x 20 x 6 ft.	
Same as at Sta. 191-47.....	364.23
535-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.	
Same as at Sta. 266-00.....	150.50
537-00. Stop Gate. 10 x 12 x 4 ft. Side Canal.	
Same as at Sta. 266-00.....	150.50
587-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.	
Same as at Sta. 266-00.....	150.50
589-92. Bridge. 100 x 15. Outlet Canal No. 2.	
Lumber R W at \$27 M ft....	3.22 86.94
" O P " 27 " "....	3.05 82.35
Carpenter Work " 5 " "....	6.27 31.35
Freight & Haul. " 9 " "....	do. 56.43
Earthwork, trenching & approaches.....	15.00
Incidental Expenses, 5%.....	13.60
Estimated Cost	285.67
593-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.	
Same as at Sta. 266-00.....	150.50
601-70. Outlet Gate. 10 x 20 x 6 ft.	
Same as at Sta. 191-47.....	364.23
602-93. Stop Gate. 60 x 18 x 6 ft.	
Same as at Sta. 269-37.....	937.46
607-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.	
Same as at Sta. 266-00.....	150.50

715-85. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00..... 150.50

Total Forward \$9,704.15

Fresno Co.

1437 Outside Canal.

Brought Forward \$9,704.15

716-15. Outlet Gate. 10 x 20 x 6.

Same as at Sta. 191-47..... 364.23

720-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00..... 150.50

783-50. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00..... 150.50

786-55. Outlet Gate. 10 x 20 x 6.

Same as at Sta. 191-47..... 364.23

786-55. Bulkhead. 30 ft. long. Side Canal.

Estimated 45.00

787-70. Stop Gate. 60 x 18 x 6 ft.

Same as at Sta. 269-37..... 937.46

791-00. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00..... 150.50

852-10. Bridge. 60 x 24.

Lumber R W at \$27 M ft. ... 3.45 93.15

" O P " 27 " " ... 7.00 189.00

Carpenter Work " 5 " " ... 10.45 52.25

Freight & Haul. " 12 " " ... do. 125.40

Earthwork, trenching & approaches..... 25.00

Incidental Expenses, etc., 5%..... 24.24

Estimated Cost 509.04

852-10. Bridge. 20 x 8. Side Canal.

Same as at Sta. 245-58..... 45.15

969-77. Bridge. 60 x 16. Outlet Canal No. 3.

Lumber R W	at \$27	M ft. . . .	1.58	42.66
" O P	" 27	" " " . . .	4.82	130.14

Totals forward	" "	" " . . .	6.40	\$172.80	\$12,420.76
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Fresno Co.

1438

Outside Canal.

Brought Forward	M ft. . . .	6.40	\$172.80	\$12,420.76
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Carpenter Work	at \$5	" " " . . .	do.	32.00
Freight & Haul.	" 12	" " " . . .	do.	76.80
Earthwork (trenching only)				3.00
Incidental Expenses, etc., 5%				14.23

Estimated Cost				298.83
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969. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00..... 150.50

969. Stop Gate. 10 x 10 x 4 ft. Side Canal.

Same as at Sta. 266-00..... 150.50

971-53. Stop Gate. 60 x 18 x 6 ft.

Lumber R W	at \$27	M ft. . . .	14.06	379.62
" O P	" 27	" " " . . .	.44	11.88
" Weirboards @	50	" " " . . .	.96	48.00
" Battens	" 30	" " " . . .	1.00	30.00
Carpenter Work	" 10	" " " . . .	16.46	164.60
Freight & Haul.	" 12	" " " . . .	do.	197.52
Earthwork, excavation & back fill				70.00
Incidental Expenses, Bolts, etc., 10%				90.16

Estimated Cost				991.78
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25. Small Outlet Gates on Side Canal.

Estimated at \$45.00..... 1,125.00

1000-00. County Line Merced County.

Measuring Gates on Outlet Gates.

12 ft. Opening	1 @ \$63.00.....	63.00
10 " "	11 " 57.00.....	627.00
Total.....		690.00
Total Estimated Cost.....		\$15,827.37

Fresno Co.

1439 Outside Canal.

Length of Canal in Fresno County 100,000 ft.= 18.94 miles.

Right of Way 200 Feet in Width.

Base 50 ft. inside slopes 3:1. Average Cut 2.50 Ft.

Side Canal 100,000 ft. 10 ft. base; Average Cut 1.60 ft.

1440 Estimated Cost of Outlet Canal No. 1.

Head gate and drops.....	\$2,908.08
Earth excavation 18,835 yds. @ 10¢.....	1,883.50
Engineering and general superintendence, etc., 10%....	479.15
Total.....	\$5,270.73

Right of way —.

List of head and stop gates on following page.

1441 Outlet Canal No. 1.

Head Gate. 40 x 14 x 6 ft.

Lumber R W	at \$27 M ft....	10.26	\$276.75
" O P	" 27 " " ...	.34	9.18
" Weirboards	" 50 " " ...	.80	40.00
" Battens	" 30 " " ...	.80	24.00
Carpenter Work	" 10 " " ...	12.20	122.00
Freight & Haul.	" 10 " " ...	do.	122.00
Earthwork, excavation & back fill.....			67.00
Incidental Expenses, Bolts, etc., 10%.....			66.09
Estimated Cost			\$727.02
3 Drops, Same as above.....			2,181.06
Estimated Cost			\$2,908.08

Outlet Canal No. 1.

Length of Canal 4,350 ft.=.82 miles.

30 ft. base, inside slopes 3:1; Average cut 3 ft.

Fresno Co.

1442 Estimated Cost of Outlet Canal No. 2.

Head gate and drops.....	\$2,396.58
Earth excavation 18,900 yds. @ 8¢.....	1,512.00
Engineering and general superintendence, etc., 10%....	390.85
Total Estimated Cost.....	\$4,299.43

Right of way —.

List of head and stop gates on following page.

1443 Outlet Canal No. 2.

Head Gate. 16 x 14 x 6 ft.

Lumber R W	at \$27 M ft....	5.96	\$160.92
" Weirboards	" 50 " "....	.21	10.50
" Battens	" 30 " "....	.50	15.00
Carpenter Work	" 10 " "....	6.67	66.70
Freight & Haul.	" 9 " "....	do.	60.00
Earthwork, excavation & back fill.....			50.00
Incidental Expenses, etc., Bolts, 10%.....			36.31
Estimated Cost			399.43
5 Drops, Same as above.....			1,997.15
Total Estimated Cost.....			\$2,396.58

Length of Canal 5,870 ft.=1.11 miles.

20 ft. base, inside slopes 3:1; Average cut 3 feet.

1444 Estimated Cost of Outlet Canal No. 3.

Head Gate and Drops	\$3,029.56
Earth Excavation 24,724 yds. @ 10¢.....	2,472.40
Engineering General Superintendence, etc., 10%.....	550.19
Total Estimated Cost	\$6,052.15

Right of Way —.

List of Head and Stop Gates on following page.

1445

Outlet Canal No. 3.

Head Gate. 24 x 18 x 7 ft.

Lumber R W	at \$27 M ft.	9.45	\$255.15
" Weirboards	" 50 " " . . . . .	.38	19.00
" Battens	" 30 " " . . . . .	.70	21.00
Carpenter Work	" 10 " "	10.53	105.30
Freight & Haul.	" 10 " "	do.	105.30
Earthwork, excavation & back fill.			58.00
Incidental Expenses, Bolts, etc.; 10%			56.37

Estimated Cost	620.12
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Drop. 30 x 18 x 5 ft.

Lumber R W.	at \$27 M ft.	9.20	248.40
" Weirboards @	50 " "36	18.00
" Battens	" 30 " "64	19.20
Carpenter Work	" 10 " "	10.20	102.00
Freight & Haul.	" 10 " "	do.	102.00
Earthwork, excavation & back fill.			58.76
Incidental expenses, bolts, etc., 10%			54.76

Estimated Cost	602.36
3 Drops, Same as above	1,807.08

Total Estimated Cost	\$3,029.56
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Outlet Canal No. 3.

Length of Canal 5,710 ft. = 1.08 miles.

30 ft. base, inside slopes 3:1; average cut 3 feet.

1446 *Estimated Cost of the Works of the San Joaquin and Kings River Canal and Irrigation Company in Merced County.*

Main Canal	Page 1.	\$74,069.12
" " Extension A	" 8.	139,652.12
Parallel " "	" 27.	58,882.20
Dos Palos Main Canal	" 36.	14,670.80
" " " Extension	" 43.	17,668.93
" " Branch Canal No. 1	" 51.	6,453.42
" " " " " 2	" 54.	13,265.23
" " " " " 3	" 59.	14,977.83
" " " " " 4	" 68.	9,321.54
Outside Canal	" 76.	86,716.32
" " Extension	" 86.	74,828.57
" " No. 4	" 94.	3,384.30
" " " 5	" 96.	7,823.22
Canal Station Improvements		1,700.00
" " Horses		200.00
" " Carts and Wagons		562.00

Total	\$524,175.60
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San Francisco, Cal., December 24th, 1906.

1447

Merced County.

Estimated Cost of Main Canal.

Stop Gates, Outlet Gates, Bridges, etc.		\$16,117.37
Earth Excavation	467,900 yds. @ 10¢..	46,790.00
" " Drain Canal	46,320 " " 7¢..	3,242.40
Telephone Line, 16.94 miles, at \$70.00.....		1,185.80
Engineering and General Superintendence, etc., 10%..		6,733.55
Total		74,069.12

Right of way 410.77 acres @ —.

List of Stop and Outlet Gates, Bridges, etc. on following pages:

1448

Main Canal.

Station 1122-00. County Line—Merced & Fresno.

1128-00. Inlet Box. 6 x 2 x 28.

Lumber R W	at \$27 M ft. ...	2.50	67.50
Carpenter Work	" 5 " " ...	do.	12.50
Freight & Haul.	" 10 " " ...	do.	25.00
Earthwork, excavation & back fill.....			10.00
Incidental Expenses, etc., 5%.....			5.75

Estimated Cost 120.75

1129-40. Inlet Gate. 10 ft. Opening.

Lumber R W	at \$27 M ft. ...	5.20	140.40
" O P	" 27 " " ...	0.32	8.64
Carpenter Work	" 10 " " ...	5.52	55.20
Freight & Haul.	" 10 " " ...	do.	55.20
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			28.94

Estimated Cost 318.38

1163-00. Outlet Gate. 5 ft. Opening.

Lumber R W	at \$27 M ft. ...	4.10	110.70
" O P	" 27 " " ...	0.36	9.72
Carpenter Work	" 10 " " ...	4.46	44.60
Freight & Haul.	" 10 " " ...	do.	44.60
Earthwork, excavation & back fill.....			27.00
Incidental Expenses, etc., 10%.....			23.66

Estimated Cost 260.28

1286-70. Inlet Gate. 10 ft. Opening.

Same as at Sta. 1129-40. 318.38

1346-00. Inlet Gate. 10 ft. Opening.

Same as at Sta. 1129-40. 318.38

\$1,336.17

Merced Co.

1449

Main Canal.

Brought Forward \$1,336.17

1346-20. Waste Gate. 48 x 28 x 8. Camp 13.

Lumber R W	at \$27	M ft. ...	21.15	571.05
" O P	" 27	" " ...	7.95	213.65
" Weirboards	" 30	" " ...	1.20	60.00
" Battens	" 30	" " ...	1.50	45.00
" Piles—sheet	" 27	" " ...	10.20	275.40
Carpenter Work	" 10	" " ...	42.00	420.00
Freight & Haul.	" 10	" " ...	do.	420.00
Driv. Piles 34 at \$2.50				85.00
Earthwork, excavation & back fill				80.00
Incidental expenses, etc., 10%				217.01

Estimated Cost \$2,387.11

1347-13. Stop Gate. 48 — 20 x 8.

Lumber R W	at \$27	M ft. ...	18.20	491.40
" O P	" 13	" " ...	4.50	121.50
" Weirboards	" 50	" " ...	1.15	57.50
" Battens	" 30	" " ...	1.00	30.00
" Piles	" 27	" " ...	5.15	139.05
Carpenter Work	" 10	" " ...	30.00	300.00
Freight & Haul.	" 10	" " ...	do.	300.00
Driving piles 28 at 2.50				70.00
Earthwork, excavation & back fill				70.00
Incidental expenses, etc., 10%				157.94

Estimated Cost \$1,737.39

1359-00. Inlet Gate. 10 ft. Opening.

Same as at Sta. 1129-40. 318.38

1375-70. Inlet Gate. 10 ft. Opening.

Same as at Sta. 1129-40. 318.38

Total forward \$6,097.43

Merced Co.

1450

Main Canal.

Brought Forward			\$6,097.43
1396-20. Inlet Gate. 10 ft. Opening.			
Same as at Sta. 1129-40.....			318.38
1460-30. Inlet Gate. 10 ft. Opening.			
Same as at Sta. 1129-40.....			318.38
1499-75. Inlet Box. 3 x 12 x 3.			
Lumber R W	at \$27 M ft....	1.30	35.10
Carpenter Work	" 10 " " ...	do.	13.00
Freight & Haul.	" 10 " " ...	do.	13.00
Earthwork, excavation & back fill.....			20.00
Incidental Expenses, etc., 10%.....			8.11
Estimated Cost			89.21

1517-33. Bridge. 67 x 14.

Lumber R W	at \$27 M ft....	1.28	34.56
" O P	" 27 " " ...	4.32	116.64
Carpenter Work	" 5 " " ...	5.60	28.00
Freight & Haul.	" 10 " " ...	do.	56.00
Earthwork			25.00
Incidental Expenses, etc., 5%.....			13.01
Estimated Cost			273.21

1615-55. Outlook Gate. 5 ft. Opening.

Same as at Sta. 1163-09.....			260.28
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1644-15. Bridge. 54 x 16.

Lumber R W	at \$27 M ft....	1.42	38.34
" O P	" 27 " " ...	4.88	131.76
Carpenter Work	" 5 " " ...	6.30	31.50
Totals forward.....	6.30	201.60	\$7,675.27

Merced Co.

1451

Main Canal.

Brought Forward	M ft....	6.30	201.60	\$7,675.27
Freight & Haul.	at \$10 " " ...	6.30	63.00	
Earthwork			25.00	
Incidental Expenses, etc., 5%.....			14.48	
Estimated Cost.....				304.08

1650-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1163-00..... 260.28

1713-90. Bridge. 56 x 16.

Lumber R W	at \$27	M ft....	1.42	38.34
" O P	" 27	" " ...	5.98	161.46
Carpenter Work	" 5	" " ...	7.40	37.00
Freight & Haul.	" 10	" " ...	do.	74.00
Earthwork				25.00
Incidental Expenses, etc., 5%				16.79

352.59

1717-40. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1163-00..... 260.28

1745-54. Pipe Drain.

Estimated Cost 1,200.00

1778-57. Bridge. 50 x 20.

Lumber R W	at \$27	M ft....	2.85	76.68
" O P	" 27	" " ...	5.52	149.04
Carpenter Work	" 5	" " ...	8.36	41.80
Freight & Haul.	" 10	" " ...	do.	83.60
Earthwork				25.00
Incidental Expenses, etc., 5%				18.80

Estimated Cost 394.92

1800-58. Bridge.

Estimated Cost 375.00

Total Forward \$10,822.42

Merced Co.

1452 Main Canal.

Brought Forward \$10,822.42

1814-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1163-00..... 260.28

1835-92. Bridge. 54 x 12.

Lumber R W	at \$27 M ft....	1.70	45.90
" O P	" 27 " " ...	4.02	108.54
Carpenter Work	" 5 " " ...	5.72	28.60
Freight & Haul.	" 10 " " ...	do.	57.20
Earthwork			25.00
Incidental Expenses, etc., 5%.....			13.26

Estimated Cost 278.50

1864-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1163-00..... 260.28

1894-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1163-00..... 260.28

1936-57. Siphon.

Estimated 2,500.00

1939-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1163-00..... 260.28

2003-38. Stop Gate. 30 x 22 x 10.

Lumber R W	at \$27 M ft....	11.13	300.51
" O P	" 27 " " ...	2.57	69.39
" Weirboards	" 50 " " ...	2.10	105.00
" Battens	" 30 " " ...	0.60	18.00
Carpenter Work	" 10 " " ...	16.40	164.00
Freight & Haul.	" 9 " " ...	do.	147.60
Earthwork			60.00
Incidental Expenses, etc., 10%.....			86.45

Estimated Cost 950.95

Total forward \$15,592.99

Merced Co.

1453

Main Canal.

Brought Forward \$15,592.99

2004-49. Bridge.

Estimated 375.00

2004—49. Waste Gate. 12 x 16 x 6. Drain Canal.

Lumber R W	at \$27 M ft....	2.30	\$62.10
Carpenter Works	@ 10 " " ...	do.	23.00
Freight & Haul.	@ 9 " " ...	do.	20.70
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			13.58

Estimated Cost	149.38
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Total Estimated Cost.....	<u>\$16,117.37</u>
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2005. End of Earthwork.

Main Canal.

Length of Canal to Head Gate Extension "A" 89,467 Feet 16.94 miles.

Length of Drain Canal 57,900 Feet.

Right of Way 200 Feet in Width.

Sections of Canals.

88,300 ft. Base 30 ft. inside slopes $2\frac{1}{2}:1$.

Side Canal " 10 " " " 3:1 & 2:1.

Merced Co.

1454

Merced County.

Estimated Cost of Main Canal Extension "A."

Stop gates, outlet gates, bridges, etc.....	\$41,407.28
Earth excavation 840,694 yds. @ 10¢.....	84,069.40
Telephone line 21.14 miles @ \$70.00.....	1,479.80
Engineering and general superintendence, etc., 10%..	12,695.64

Total.....	<u>\$139,652.12</u>
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Right of way 512.4 acres @ —.

List of stop and outlet gates, bridges, etc., on following pages.

1455

Main Canal Extension "A."

Waste Gate. 120 x 20 x 16. Los Banos.

Lumber R W	at \$27	M ft....	15.00	405.00
" O P	" 27	" " ...	7.80	210.60
" Weirboards	" 50	" " ...	3.30	165.00
" Battens	" 30	" " ...	0.70	21.00
" Piles Sheet	" 27	" " ...	23.70	639.90
" Round 612 ft.	@ 25¢	" " ...	24.80	153.00
Carpenter Work	at \$10	" " ...	75.30	753.00
Freight & Haul.	" 9	" " ...	do.	677.70
Drive piles sheet 424	@ \$1.00	.....		424.00
" " round 65	" 2.50	.....		162.50
Earthwork, excavation 7 back fill			100.00
Incidental Expenses, etc., 10%			371.17

Estimated Cost	\$4,082.87
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2016-67. Head Gate. 50 x 22 x 10.

Lumber R W	at \$27	M ft....	17.85	481.95
" O P	" 27	" " ...	4.95	133.65
" Weirboards	" 50	" " ...	1.45	72.50
" Battens	" 30	" " ...	1.50	45.00
" Piles Sheet	@ 27	" " ...	8.40	226.80
Carpenter Work	at 10	" " ...	34.15	341.50
Freight & Haul.	at 9	" " ...	do.	307.35
Driv. piles sheet 200	at \$1.00	.....		200.00
Earthwork, excavation 7 back fill			67.00
Incidental Expenses, etc., 10%			187.57

Estimated Cost	\$2,063.32
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2021-32. Outlet Gate. 5 ft. Opening.

Lumber R W	at \$27	M ft....	3.72	100.44
Carpenter Work	" 10	" " ...	do.	37.20

Totals forward.....	" " ...	3.72	137.64	\$6,146.19
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Merced Co.

1456

Main Canal Extension "A."

Brought Forward	M ft....	3.72	\$137.64	\$6,146.19
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Freight & Haul.	at \$9	" " ...	do.	33.48
Earthwork, excavation & back fill			25.00
Incidental Expenses, etc., 10%			19.61

Estimated Cost	215.73
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2021-30. Inlet Gate. 5 x 16 x 5.

Lumber R W	at \$27 M ft....	1.62	43.74
" O P	" 27 " " ...	0.38	10.26
Carpenter Work	" 10 " " ...	2.00	20.00
Freight & Haul.	" 9 " " ...	do.	18.00
Earthwork, excavation & back fill.....			25.00
Incidental Expenses, etc., 10%.....			11.70

Estimated Cost	128.70
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2054-99. Outlet Gate. 3 x 18 x 4.

Estimated	100.00
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2076-96. Bridge. 76 x 16.

Lumber R W	at \$27 M ft....	1.40	37.80
" O P	" 27 " " ...	6.60	178.20
Carpenter Work	" 5 " " ...	8.00	40.00
Freight & Haul.	" 9 " " ...		72.00
Earthwork			25.00
Incidental Expenses, etc., 5%.....			17.65

Estimated Cost	370.65
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2077. Outlet Gate. 5 x 16 x 6.

Lumber R W	at \$27 M ft....	2.00	54.00
" O P	" 27 " "30	8.10
Carpenter Work	" 10 " " ...	2.30	23.00
Freight & Haul.	" 9 " " ...	do.	20.70

Totals forward	\$105.80	\$6,961.27
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Merced Co.

1457

Main Canal Extension "A."

Brought Forward	\$105.80	\$6,961.27
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Earthwork, excavation & back fill.....	25.00
Incidental Expenses, etc., 10%.....	13.08

Estimated Cost	143.88
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2102-34. Outlet Gate. 3 x 16 x 7.

Lumber R W	at \$27 M ft....	1.65	44.55
Carpenter Work	" 10 " " ...	do.	16.50
Freight & Haul.	" 9 " " ...	do.	14.85
Earthwork, excavation & back fill.....			25.00
Incidental Expenses, etc., 10%.....			10.09

Estimated Cost	110.99
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2107-54. Outlet Gate. 5 x 18 x 7.

Lumber R W	at \$27 M ft....	2.00	54.00
" O P	" 27 " "30	8.10
Carpenter Work	" 10 " " ...	2.30	23.00
Freight & Haul.	" 9 " " ...	do.	20.70
Earthwork, excavation, & back fill.....			25.00
Incidental Expenses, etc., 10%.....			13.08

Estimated Cost	143.88
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2115-17. Bridge. 62 x 16.

Lumber R W	at \$27 M ft....	1.62	45.36
" O P	" 27 " " ...	4.22	113.94
Carpenter Work	" 5 " " ...	5.90	29.50
Freight & Haul.	" 9 " " ...	do.	53.10
Earthwork			25.00
Incidental Expenses, etc., 5%.....			13.34

Estimated Cost	280.24
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Total Forward	\$7,640.26
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Merced Co.

1458

Main Canal Extension "A."

Brought Forward	\$7,640.26
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2117-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32.....	215.73
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2120-88. Outlet Culvert. 18 x 3 x 40.

Estimated	100.00
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2127-38. Outlet Gate. 5 x 12 x 6.

Same as at Sta. 2021-30.....	128.70
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2138-00. Outlet Gate. 4 x 16 x 4.

Same as at Sta. 2102-34.....	110.99
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2152-37. Outlet Gate. 5 x 24 x 5.

Same as at Sta. 2077-56.....	143.88
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2155-01. Stop Gate. 42 x 24 x 9. Dog Town.

Lumber R W	at \$27	M ft. . .	11.50	\$310.50
" O P	" 27	" " . . .	5.00	135.00
" Weirboards	" 50	" " . . .	1.10	55.
" Battens	" 30	" " . . .	1.40	42.00
Carpenter Work	" 10	" " . . .	19.00	190.00
Freight & Haul.	" 9	" " . . .	do.	171.00
Earthwork, excavation & back fill				70.00
Incidental Expenses, etc., 10%				97.35

Estimated Cost	1,070.85
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2189-58. Outlet Gate. 3 x 14 x 3.

Same as at Sta. 2054-99	100.00
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2193-30. Bridge. 70 x 16.

Lumber R W	at \$27	M ft. . .	2.12	57.24
" O P	" 27	" " . . .	2.54	65.85
Carpenter Work	" 5	" " . . .	4.66	23.30
Freight & Haul.	" 9	" " . . .	do.	41.94

Totals forward	\$188.33	\$9,510.41
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Merced Co.

1459 5. Main Canal Extension "A."

Brought Forward	\$188.33	\$9,510.41
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Earthwork	25.00
Incidental Expenses, etc., 5%	10.66

Estimated Cost	223.99
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2183-73. Outlet Box. 18 x 2 x 28.

Estimated	100.00
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2205-02. Inlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32	215.73
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2266-34. Bridge Over Outlet Canal No. 4.

Estimated	200.00
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2290-14. Waste Gate. 14 x 18 x 7.

Lumber R W	at \$27	M ft....	4.20	113.40
" O P	" 27	" "86	23.22
" Weirboards @	50	" "22	11.00
" Battens	at 30	" " ...	.52	15.60
Carpenter Work	" 10	" " ...	5.60	56.00
Freight & Haul.	" 9	" " ...	do.	50.40
Earthwork, excavation & back fill.....				35.00
Incidental Expenses, etc., 10%.....				30.46

Estimated Cost 335.08

2299-00. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 2102-34..... 110.99

2324-65. Inlet Gate. 6 ft. Opening.

Lumber R W	at \$27	M ft....	2.70	72.90
" O P	at 27	" " ...	.40	10.80
Carpenter Work	" 10	" " ...	3.10	31.00
Freight & Haul.	" 9	" " ...	do.	27.90
Earthwork, excavation & back fill.....				30.00

Totals forward \$172.60 \$10,696.20

Merced Co.

1460 6. Main Canal Extension "A."

Brought Forward	\$172.60	\$10,696.20
Incidental Expenses, etc., 10%.....	17.26	

Estimated Cost 189.86

2325-03. Outlet Gate. 3 x 20 x 3.

Same as at Sta. 2054-99..... 100.00

2341-19. Bridge. 66 x 16.

Lumber R W	at \$27	M ft....	1.75	47.25
" O P	" 27	" " ...	4.85	130.95
Carpenter Work	" 5	" " ...	6.60	33.00
Freight & Haul.	" 9	" " ...	do.	59.40
Earthwork				25.00
Incidental Expenses, etc., 5%.....				14.78

Estimated Cost 310.38

2360-70. Outlet Gate. 3.5 x 18 x 5.

Same as at Sta. 2102-34..... 110.99

2377-24. Bridge.

Estimated 375.00

2383-56. Outlet Gate. 3.5 x 14 x 6.

Same as at Sta. 2102-34..... 110.99

2398-20. Inlet Gate. 10 ft. Opening.

Lumber R W	at \$27	M ft....	5.50	148.50
" O P	" 27	" " ...	.20	5.40
Carpenter Work	" 10	" " ...	5.70	57.00
Freight & Haul.	" 10	" " ...	do.	57.00
Earthwork, excavation & back fill.....				30.00
Incidental Expenses, etc., 10%.....				29.79

Estimated Cost 327.69

Total forward \$12,221.11

Merced Co.

1461 7. Main Canal Extension "A."

Brought Forward \$12,221.11

2399-43. Outlet Gate. 3 x 16 x 6.

Same as at Sta. 2102-34..... 110.99

2405-62. Bridge 72 x 16.

Lumber R W	at \$27	M ft....	2.26	61.02
" O P	" 27	" " ...	4.90	132.30
Carpenter Work	" 5	" " ...	7.16	35.80
Freight & Haul.	" 10	" " ...	do.	71.60
Earthwork				25.00
Incidental Expenses, etc., 5%.....				16.28

Estimated Cost 342.00

2406-46. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

2432-30. Outlet Gate. 10 ft. Opening.

Same as at Sta. 2398-20..... 327.69

2433-90. Inlet Gate. 10 ft. Opening.

Same as at Sta. 2398-20..... 327.69

2453-96. Outlet Gate. 4.5 x 18 x 5.

Same as at Sta. 2077-55..... 143.88

2459-60. Outlet Gate. 5 x 16 x 6.

Same as at Sta. 2077-56..... 143.88

2460-15. Stop Gate. 41 x 24 x 8.

Lumber R W	at \$27	M ft. . . .	11.30	305.10
" O P	" 27	" " . . .	4.45	120.15
" Weirboards	" 50	" " . . .	1.70	85.00
" Battens	" 30	" " . . .	1.15	34.50
Carpenter Work	" 10	" " . . .	18.60	186.00
Freight & Haul.	" 10	" " . . .	do.	186.00

\$916.75 \$13,832.97

Merced Co.

1462 8. Main Canal Extension "A."

Brought Forward	\$916.75	\$13,832.97
Earthwork, excavation & back fill.....	75.00	
Incidental Expenses, etc., 10%.....	99.17	

Estimated Cost 1,090.92

2461-67. Stop Gate. 41 x 20 x 8.

Lumber R W	at \$27	M ft. . . .	10.24	276.48
" O P	" 27	" " . . .	2.06	55.62
" Weirboards	" 50	" " . . .	.96	48.00
" Battens	" 30	" " . . .	.94	28.20
Carpenter Work	" 10	" " . . .	24.20	242.00
Freight & Haul.	" 10	" " . . .	do.	242.00
Earthwork, excavation & back fill.....				75.00
Incidental Expenses, etc., 10%.....				96.73

Estimated Cost 1,064.03

2485-02. Outlet Gate. 10 ft. Opening.

Same as at Sta. 2398-20..... 327.69

2485-13. Inlet Gate. 10 ft. Opening.

Same as at Sta. 2398-20..... 327.69

2501-54. Inlet Gate. 10 ft. Opening.

Same as at Sta. 2398-20..... 327.69

2501-54. Outlet Gate. 10 ft. Opening.

Same as at Sta. 2398-20..... 327.69

2507-00. Outlet Culvert. 3 x 3 x 20.

Estimated 100.00

2578-42. Outlet Gate. 3 x 12 x 6.

Estimated 100.00

2597-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

Total forward \$17,714.41

Merced Co.

1463 9. Main Canal Extension "A."

Brought Forward \$17,714.41

2608-48. Outlet Box. 3 x 3 x 12. Left Bank.

Estimated 50.00

2609-09. Box 3 x 5 x 6.

Estimated 75.00

2610-12. Stop Gate. 42 x 20 x 9.

Lumber R W	at \$27 M ft.	11.95	\$322.65
" O P	" 27 " "	3.05	82.35
" Weirboards	" 50 " "	1.15	57.50
" Battens	" 30 " "	.95	28.50
Carpenter Work	" 10 " "	17.10	171.00
Freight & Haul.	" 10 " "	do.	171.00
Earthwork, excavation & back fill.....			76.00
Incidental Expenses, etc., 10%.....			90.80

Estimated Cost 998.80

2625-85. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

2626-13. Bridge. 68 x 16.

Lumber R W	at \$27 M ft. . . .	1.45	39.15
" O P	" 27 " " . . .	6.25	168.75
Carpenter Work	" 5 " " . . .	7.70	38.50
Freight & Haul.	" 10 " " . . .	do.	77.00
Earthwork		25.00
Incidental Expenses, etc., 5%		17.42

Estimated Cost	365.82
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2639-82. Outlet Gate. 3.5 x 18 x 4.

Same as at Sta. 2102-34	110.99
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Total forward	\$19,530.75
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Merced Co.

1464 10. Main Canal Extension "A."

Brought Forward	\$19,530.75
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2659-52. Outlet Gate. 3 x 16 x 5.

Same as at Sta. 2102-34	110.99
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2669-45. Outlet Culvert. 3 x 3 x 24.

Estimated	100.00
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2680-04. Bridge.

Estimated	375.00
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2680-46. Bridge over Outlet Canal No. 5.

Estimated	200.00
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2684-61. Outlet Box. 1.5 x 2.5 x 16.

Estimated	50.00
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2687-09. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32	215.73
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2689-63. Outlet Culvert. 1.5 x 3 x 16.

Estimated	50.00
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2702-63. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 2054-99..... 100.00

2704-85. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

2724-12. Outlet Box. 1.5 x 3 x 16.

Same as at Sta. 2689-63..... 50.00

2728-70. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

2739-32. Outlet Box. Left Bank.

Estimated 75.00

2739-74. Stop Gate. 41 x 24 x 9.

Same as at Sta. 2460-15..... 1,090.92

2740-61. Bridge.

Estimated 400.00

Total forward \$22,779.85

Merced Co.

1465 11. Main Canal Extension "A."

Brought Forward \$22,779.85

2754-73. Outlet Gate. 3 x 16 x 6.

Same as at Sta. 2054-99..... 100.00

2767-51. Outlet Gate. 3 x 16 x 5. Left Bank.

Same as at Sta. 2054-99..... 100.00

2768-04. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

2783-26. Outlet Gate. 3 x 3 x 20. Left Bank.

Estimated 100.00

64-722

2784-63. Outlet Gate. 3 x 3 x 16.

Estimated	50.00
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2792-40. Outlet Gate. 14 ft. Opening.

Lumber R W	at \$27 M ft....	6.20	\$167.40
" O P	" 27 " "27	7.29
Carpenter Work	" 10 " " ...	6.47	64.70
Freight & Haul.	" 8 " " ...	do.	51.76
Earthwork			35.00
Incidental Expenses, etc., 10%.....			32.61

Estimated Cost	358.76
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2792-90. Inlet Gate. 14 ft. Opening.

Same as at Sta. 2792-40.....	358.76
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2803-88. Outlet Gate. 5 x 10 x 6.

Same as at Sta. 2077-55.....	143.88
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2804-00. Inlet Box. 3 x 3 x 12.

Estimated	50.00
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2815-80. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32.....	215.73
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2815-80. Outlet Gate. Left Bank.

Same as at Sta. 2021-32.....	215.73
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Total forward	24,688.44
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Merced Co.

1466 12. Main Canal Extension "A."

Brought Forward	\$24,688.44
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2825-48. Bridge. 66 x 18.

Lumber R W	at \$27 M ft....	2.46	\$66.42
" O P	" 27 " " ...	5.24	141.48
Carpenter Work	" 5 " " ...	7.70	38.50
Freight & Haul.	" 8 " " ...	do.	61.60
Earthwork			25.00
Incidental Expenses, etc., 5%.....			16.65

Estimated Cost	349.65
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2826-73. Inlet Gate. 14 ft. Opening.

Same as at Sta. 2792-40..... 358.76

2826-77. Outlet Gate. 14 ft. Opening.

Same as at Sta. 2792-40..... 358.76

2832-00. Outlet Gate. 5 x 14 x 7.

Same as at Sta. 2077-55..... 143.88

2846-18. Outlet Gate. 3 x 3 x 14.

Estimated 50.00

2856-53. Stop Gate. 42 x 20 x 8.

Lumber R W	at \$27	M ft....	7.85	211.95
" O P	" 27	" "....	3.05	82.35
" Weirboards @	50	" "....	.95	47.50
" Battens	at 30	" "....	1.35	40.50
" Piles Sheet @	27	" "....	9.00	243.00
Carpenter Work	at 10	" "....	22.20	222.00
Freight & Haul.	" 8	" "....	do.	177.60
Driv. piles 160	" 1	" "....		160.00
Earthwork, excavation & back fill.....				75.00
Incidental Expenses, etc., 10%.....				125.99

Estimated Cost 1,385.89

Total forward \$27,335.38

Merced Co.

1467

13. Main Canal Extension "A."

Brought Forward \$27,335.38

Waste Gate. 33 x 20 x 9.5. Los Garzas.

Lumber R W	at \$27	M ft....	6.02	\$162.54
" O P	" 27	" "....	3.43	92.68
" Weirboards @	50	" "....	.86	43.00
" Battens	at 30	" "....	.60	18.00
" Piles	" 27	" "....	4.93	133.11
Carpenter Work	" 10	" "....	15.84	158.40
Freight & Haul.	" 8	" "....	do.	126.72
Driv. piles 88	" 1	" "....		88.00
Earthwork, excavation & back fill.....				70.00
Incidental Expenses, etc., 10%.....				89.24

Estimated Cost 981.69

2857-05. Stop Gate. 42 x 20 x 9.

Same as at Sta. 2856-53. 1,385.89

2876-52. Inlet Gate. 14 ft. Opening.

Same as at Sta. 2792-40 358.76

2876-52. Outlet Gate. 14 ft. Opening.

Same as at Sta. 2792-40 358.76

2681-61. Bridge. 63 x 16.

Lumber R W	at \$27 M ft. . . .	5.67	153.09
" O P	" 27 " " . . .	5.70	153.90
Carpenter Work	" 5 " " . . .	7.37	36.85
Freight & Haul.	" 8 " " . . .	do.	58.96
Earthwork			25.00
Incidental Expenses, etc., 5%			21.36

Estimated Cost 448.66

2893-62. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32. 215.73

Total forward \$31,084.87

Merced Co.

1468 14. Main Canal Extension "A."

Brought Forward \$31,084.87

2897-45. Outlet Gate. 7½ x 18 x 6.

Lumber R W	at \$27 M ft. . . .	4.00	\$108.00
" O P	" 27 " " . . .	.50	13.50
Carpenter Work	" 10 " " . . .	4.50	45.00
Freight & Haul.	" 8 " " . . .	do.	36.00
Earthwork, excavation & back fill.			30.00
Incidental Expenses, etc., 10%			23.25

Estimated Cost 255.75

2907-44. Outlet Gate. 7½ x 18 x 6.

Same as at Sta. 2897-45. 255.75

2908-18. Stop Gate. 40 x 18 x 8.

Lumber R W	at \$27	M ft. . . .	10.25	276.75
" O P	" 27	" " . . .	.35	9.45
" Weirboards @	50	" " . . .	.80	40.00
" Battens	at 30	" " . . .	.80	24.00
Carpenter Work	" 8	" " . . .	12.20	122.00
Freight & Haul.	" 8	" " . . .	do.	97.60
Earthwork, excavation & back fill.				67.00
Incidental Expenses, etc., 10%				63.68

Estimated Cost	700.48
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2910-41. Bridge.

Estimated	500.00
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2911-29. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32.	215.73
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2921-78. Outlet Gate. 3½ x 20 x 6.

Estimated	125.00
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Total forward	\$33,137.58
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Merced Co.

1469 15. Main Canal Extension "A."

Brought Forward	\$33,137.58
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2936-45. Bridge. 64 x 16.

Lumber R W	at \$27	M ft. . . .	1.67	\$45.09
" O P	" 27	" " . . .	5.28	142.56
Carpenter Work	" 5	" " . . .	6.95	34.75
Freight & Haul.	" 8	" " . . .	do.	55.60
Earthwork				25.00
Incidental Expenses, etc., 5%				15.15

Estimated Cost	318.15
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2937-29. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32.	215.73
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2937-68. Outlet Box. 4 x 4 x 16. Left Bank.

Estimated	50.00
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2941-69. Outlet Gate. 5.5 x 14 x 4.

Same as at Sta. 2077-55. 143.88

2947-57. Outlet Gate. 3 x 20 x 4.

Same as at Sta. 2102-34. 110.99

2967-29. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32. 215.73

2967-60. Stop Gate. 42 x 26 x 9.

Lumber R W	at \$27	M ft. . . .	10.74	289.98
" G P	" 27	" " . . .	3.90	105.30
" Weirboards @	50	" " . . .	1.00	50.00
" Battens	at 30	" " . . .	1.36	40.80
Carpenter Work	" 10	" " . . .	17.00	170.00
Freight & Haul.	" 8	" " . . .	do.	136.00
Earthwork, excavation & back fill.				67.00
Incidental Expenses, etc., 10%				85.90

Estimated Cost 944.98

Total forward \$35,137.04

Merced Co.

1470 16. Main Canal Extension "A."

Brought Forward \$35,137.04

2981-35. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 2102-34. 110.99

2994-88. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 2102-34. 110.99

3003-15. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32. 215.73

3007-26. Outlet Gate. 3.5 x 14 x 5.

Same as at Sta. 2102-34. 110.99

3027-47. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32. 215.73

3048-55. Outlet Gate. 3.5 x 16 x 4.

Same as at Sta. 2102-34..... 110.99

3063-39. Outlet Gate. 2.5 x 16 x 5.

Same as at Sta. 2102-34..... 110.99

3068-33. Outlet Gate. 3.5 x 16 x 4.

Same as at Sta. 2102-34..... 110.99

3069-29. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32..... 215.73

3069-74. Stop Gate. 41 x 18 x 9.

Lumber R W	at \$27 M ft....	8.87	\$239.49
" O P	" 27 " " ...	2.20	59.40
" Weirboards @	50 " " ...	1.00	50.00
" Battens	at 30 " " ...	1.13	33.90
Carpenter Work	" 10 " " ...	13.20	132.00
Freight & Haul.	" 8 " " ...	do.	105.60
Earthwork, excavation & back fill.....			67.00
Incidental Expenses, etc., 10%.....			68.73

Estimated Cost 756.12

Total forward \$37,206.29

Merced Co.

1471 17. Main Canal Extension "A."

Brought Forward \$37,206.29

3077-93. Bridge. 66 x 16.

Lumber R W	at \$27 M ft....	1.76	\$47.52
" O P	" 27 " " ...	6.50	175.50
Carpenter Work	" 5 " " ...	8.26	41.30
Freight & Haul.	" 8 " " ...	do.	66.08
Earthwork			25.00
Incidental Expenses, etc., 5%.....			17.72

Estimated 373.12

3078-95. Outlet Gate. 5 x 16 x 6.

Same as at Sta. 2077-55..... 148.88

1000 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

3086-24. Outlet Gate. 5 x 16 x 5.

Same as at Sta. 2077-55. 143.88

3093-03. Outlet Gate. 5 ft. Opening.

Same as at Sta. 2021-32. 215.73

3105-30. Inlet Gate. 3 x 14 x 5.

Same as at Sta. 2102-34. 110.99

3105-69. Bridge. 68 x 12.

Lumber R W	at \$27 M ft. . . .	1.00	27.00
" O P	" 27 " " . . .	3.20	86.40
Carpenter Work	" 5 " " . . .	4.20	21.00
Freight & Haul.	" 8 " " . . .	do.	33.60
Earthwork			25.00
Incidental Expenses, etc., 5%			9.65

Estimated Cost 202.65

3118-87. Outlet Gate. 3 x 16 x 5.

Same as at Sta. 2102-34. 110.99

Total Forward \$38,507.53

Merced Co.

1472 18. Main Canal Extension "A."

Brought Forward \$38,507.53

3121-22. Outlet Gate. 8 x 12 x 5. Left Bank.

Same as at Sta. 2897-45. 255.75

3124-97. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 2054-99. 100.00

3125-11. Outlet Gate. 2 x 3 x 12. Left Bank.

Estimated 50.00

3132-67. County Line, Merced & Stanislaus.

Measuring Gates on Outlet Gates.

14 ft. opening	3 at	\$68.00	.....	\$204.00
10 " "	3 "	57.00	.....	171.00
8 " "	3 "	50.00	.....	150.00
5 " "	39 "	33.00	.....	1,287.00
3 " "	26 "	23.00	.....	598.00
1½ " "	6 "	14.00	.....	84.00

Total 2,494.00

Total Estimated Cost..... \$41,407.28

Main Canal Extension "A."

Length of Canal in Merced County 111,600 ft.= 21.14 miles.

Right of way 200 Ft. in Width.

Canal Sections.

34,400 ft. base 30 ft. inside slopes 3:1 cut 5.3 ft.
 77,200 " " 30 " " " 2½ " 4.5 "

Merced Co.

1473

Merced County.

Estimated Cost of Parallel Canal.

Stop gate, outlet gate, bridges, etc.	\$13,918.67
Earth excavation 396,106 yds. @ 10¢	39,610.60
Engineering and general superintendence, etc., 10% ..	5,352.93
Total	\$58,882.20

Right of way.

List of stop and outlet gates, bridges, etc., on following pages.

1474

Parallel Canal.

Station 1122-00. County Line—Merced & Fresno.

1133-50. Outlet Gate. 5 x 18 x 5.

Lumber R W	at \$27 M ft.	1.53	\$41.31
" O P	" 27 " " ....	.37	9.99
Carpenter Work	" 10 " "	1.90	19.00
Freight & Haul.	" 10 " "	do.	19.00
Earthwork, excavation & back fill			25.00
Incidental Expenses, etc., 10%			11.43

Estimated Cost \$125.73

1148-13. Outlet Gate. 7 x 12 x 4.

Lumber R W	at \$27	M ft. . . .	2.22	59.94
" O P	" 27	" " . . .	.28	7.56
Carpenter Work	" 10	" " . . .	2.50	25.00
Freight & Haul.	" 10	" " . . .	do.	25.00
Earthwork, excavation & back fill.				30.00
Incidental Expenses, etc., 10%				14.75

Estimated Cost	162.25
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1163-68. Outlet Gate. 5 x 20 x 5.

Same as at Sta. 1133-50.	125.73
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1226-95. Outlet Gate. 7 x 20 x 5.

Same as at Sta. 1148-13.	125.73
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1228-86. Stop Gate. 40 x 16 x 8.

Lumber R W	at \$27	M ft. . . .	7.44	200.88
" O P	" 27	" "76	20.52
" Weirboards	" 50	" "84	42.00
" Battens	" 30	" " . . .	.96	28.80
Carpenter Work	" 10	" " . . .	10.00	100.00
Freight & Haul.	" 10	" " . . .	do.	100.00

Totals Forward	\$492.20	\$539.44
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Merced Co.

1475

2. Parallel Canal.

Brought Forward	\$492.20	\$539.44
Earthwork, excavation & back fill.	65.00	
Incidental Expenses, etc., 10%	55.72	

Estimated Cost	612.92
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1346-22. Waste Gate. 36 x 24 x 12. Camp 13.

Lumber R W	at \$27	M ft. . . .	21.72	586.44
" O P	" 27	" " . . .	6.34	171.18
" Weirboards	@ 50	" " . . .	1.30	65.00
" Battens	at 30	" " . . .	1.24	37.20
" Piles	" 27	" " . . .	5.80	156.60
Carpenter Work	" 10	" " . . .	36.40	364.00
Freight & Haul.	" 10	" " . . .	do.	364.00
Driv. Piles 28	" 2.50	. . . . .		70.00
Earthwork, excavation & back fill.				80.00
Incidental Expenses, etc., 10%				189.44

Estimated Cost	\$2,083.86
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1346-93. Stop Gate. 48 x 24 x 6.

Lumber R W	at \$27 M ft.	10.26	277.02
" O P	" 27 " "	4.64	125.28
" Weirboards @	50 " "	.72	36.00
" Battens	30 " "	1.00	30.00
Carpenter Work	" 10 " "	16.62	166.20
Freight & Haul.	" 10 " "	do.	166.20
Earthwork, excavation & back fill			70.00
Incidental Expenses, etc., 10%			87.07

Estimated Cost 957.77

1380-77. Outlet Box. 3 x 3 x 12.

Estimated 75.00

Total forward \$4,268.99

Merced Co.

1476 3. Parallel Canal.

Brought Forward \$4,268.99

1445-16. Outlet Box. 3 x 3 x 12.

Estimated 75.00

1463-22. Outlet Gate. 3 x 20 x 4.

Lumber R W	at \$27 M ft.	1.40	\$37.80
Carpenter Work	" 10 " "	do.	14.00
Freight & Haul.	" 10 " "	do.	14.00
Earthwork, excavation & back fill			20.00
Incidental Expenses, etc., 10%			8.58

94.38

1517-33. Bridge. 72 x 16.

Lumber R W	at \$27 M ft.	1.02	27.54
" O P	" 27 " "	6.48	174.96
Carpenter Work	" 5 " "	7.50	37.50
Freight & Haul.	" 10 " "	do.	75.00
Earthwork			25.00
Incidental Expenses, etc., 5%			17.00

Estimated Cost 357.00

1521-51. Outlet Gate. 3 x 10 x 5.

Same as at Sta. 1463-22 94.38

1583-16. Outlet Gate. 5.5 x 14 x 5.

Estimated	100.00
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1635-20. Outlet Gate. 3 x 10 x 5.

Same as at Sta. 1463-22.....	94.38
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1645-15. Bridge. 55 x 16.

Lumber R W	at \$27 M ft....	1.42	38.34	
" O P	" 27 " "....	4.88	131.76	
Carpenter Work	" 5 " "....	6.30	31.50	
Totals forward	" " "....	6.30	\$201.60	\$5,084.13

Merced Co.

1477

4. Parallel Canal.

Brought Forward	at M ft....	6.30	\$201.60	\$5,084.13
Freight & Haul.	at " "....	do.	63.00	
Earthwork			25.00	
Incidental Expenses, etc. 5%			14.48	

Estimated Cost	304.08
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1656-33. Outlet Gate. 5 ft. Opening.

Lumber R W	at \$27 M ft....	4.12	111.24
" O P	" 27 " "....	.50	13.50
Carpenter Work	" 10 " "....	4.62	46.20
Freight & Haul.	" 10 " "....	do.	46.20
Earthwork, excavation & back fill			25.00
Incidental Expenses, etc. 5%			12.10

Estimated Cost	254.24
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1695-07. Outlet Gate. 3 x 10 x 4.

Same as at Sta. 1463-22	94.38
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1713-00. Outlet Gate. 5 x 8 x 5.

Same as at Sta. 1656-33	254.24
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1713-90. Bridge. 66 x 16.

Lumber R W	at \$27 M ft....	1.95	52.65
" O P	" 27 " "....	5.38	145.26
Carpenter Work	" 5 " "....	7.33	36.65
Freight & Haul.	" 10 " "....	do.	73.30
Earthwork			25.00
Incidental Expenses, etc. 5%			16.64

Estimated Cost	349.50
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1717-68. Outlet Gate. 3 x 16 x 5.

Same as at Sta. 1463-22 94.38

1721-06. Outlet Gate. 3 x 14 x 3.

Same as at Sta. 1463-22 94.38

Total forward \$6,529.33

Merced Co.

1478 5. Parallel Canal.

Brought Forward \$6,529.33

1732-28. Outlet Gate. 5 x 16 x 5.

Same as at Sta. 1133-50 125.73

1761-77. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 1463-22. 94.38

1777-25. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33 254.24

1778-57. Stop Gate. 36 x 24 x 8.

Lumber, R W	at \$27 M ft....	11.84	\$309.68
" O P	" 27 " "....	4.20	113.40
" Weirboards	@ 50 " "....	.86	43.00
" Battens	at 30 " "....	.80	24.00
Carpenter Work	" 10 " "....	17.70	177.00
Freight & Haul.	" 10 " "....	do.	177.00
Earthwork, excavation & back fill	.....		65.00
Incidental Expenses, etc. 10%	.....		90.90

Estimated Cost 999.98

1800-58. Bridge.

Estimated 400.00

1814-41. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33..... 254.24

1825-93. Outlet Box. 3 x 3 x 16.

Estimated 80.00

1829-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33..... 254.25

1834-00. Outlet Gate. 3 x 12 x 4.

Same as at Sta. 1463-22..... 94.38

Total forward \$9,086.52

Merced Co.

1479

6. Parallel Canal.

Brought Forward \$9,086.52

1835-82. Bridge. 64 x 16.

Lumber R W	at \$27	M ft....	1.50	\$40.50
" O P	" 27	" "....	5.20	140.40
Carpenter Work	" 5	" "....	6.70	33.50
Freight & Haul.	" 10	" "....	do.	67.00
Earthwork				25.00
Incidental Expenses, etc., 5%				15.32

Estimated Cost 321.72

1846-80. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33..... 254.24

1858-00. Outlet Gate. 6 x 14 x 7.

Lumber R W	at \$27	M ft....	2.70	72.90
" O P	" 27	" "....	.40	10.80
Carpenter Work	" 10	" "....	3.10	31.00
Freight & Haul.	" 10	" "....	do.	31.00
Earthwork, excavation & back fill.....				25.00
Incidental Expenses, etc., 10%.....				17.07

Estimated Cost 187.77

1863-57. Outlet Gate. 3 x 12 x 5.

Same as at Sta. 1463-22..... 94.38

1864-00. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33..... 254.24

1883-00. Outlet Gate. 4 x 30 x 4.

Lumber R W	at \$27	M ft....	2.02	54.54
" O P	" 27	" " ....	.22	5.94
Carpenter Work	" 10	" "	2.24	22.40
Freight & Haul.		do.		22.40

Totals forward	105.28	\$10,198.87
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Merced Co.

1480

7. Parallel Canal.

Brought Forward	\$105.28	\$10,198.87
Earthwork, excavation & back fill.....	25.00	
Incidental Expenses, etc., 10%.....	13.02	

Estimated Cost	143.30
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1893-21. Outlet Gate. 4 ft. Opening.

Same as at Sta. 1656-33.....	254.24
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1893-54. Stop Gate. 36 x 24 x 8.

Lumber R W	at \$27	M ft....	9.50	256.50
" O P	" 27	" "	3.50	94.50
" Weirboards @	50	" "85	42.50
" Battens	at 30	" " ....	.85	25.50
Carpenter Work	" 10	" "	14.70	147.00
Freight & Haul.	" 10	" "	do.	147.00
Earthwork, excavation & back fill				65.00
Incidental Expenses, etc., 10%.....				77.80

Estimated Cost	855.80
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1894-61. Bridge.

Estimated	500.00
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1938-00. Bridge.

Estimated	500.00
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1938-75. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33.....	254.24
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1977-99. Outlet Gate. 5 ft. Opening.

Same as at Sta. 1656-33.....	254.24
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1994-00. Outlet Box. 18 x 3 x 16.

Estimated	50.00
Total forward	\$13,010.69

1995-50. End Parallel Canal.

Merced Co.

1481 8. Parallel Canal.

Brought Forward	\$13,010.67
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Measuring Gates on Outlet Gates.

8	ft. opening	2	@	\$50.00	\$100.00
5	"	15	"	33.00	495.00
3	"	13	"	23.00	299.00
1½	"	1	"	14.00	.....	14.00
Total						908.00
Total Estimated Cost						\$13,918.67

Parallel Canal.

Length of Canal in Merced County 87,350 ft. 16.54 miles.

Sections of Canal.

25,250	Ft. Base	30	ft. Inside Slopes	3	:1	average cut	3.6	ft.
62,100	"	30	"	"	2½:1	"	3.0	"

Merced Co.

1482 Merced County.

Estimated Cost of Dos Palos Main Canal.

Stop and outlet gates, bridges, etc.	\$10,646.28
Earth excavation 26,908 yds. at 10¢	2,690.80
Engineering and general superintendence, etc., 10% ...	1,333.72
Total	\$14,670.80

Right of way, 42.26 Acres.

List of stop and outlet gates, bridges, etc., on following pages.

1483

Dos Palos Main Canal.

Station 567-00. County Line.

467-42. Outlet Gate. 6 x 20 x 6. Right.

Lumber R W	at \$27	M ft. . . .	3.95	\$106.65
" O P	" 27	" " " "	.40	10.80
" Battens	" 30	" " " "	.20	6.00
Carpenter Work	" 10	" " " "	4.55	45.50
Freight & Haul.	" 10	" " " "	do.	45.50
Earthwork, excavation & back fill.				25.00
Incidental Expenses, etc., 10%				23.94

Estimated Cost	\$263.39
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470-00. Outlet Gate. # 4 x 18 x 5. Left.

Lumber R W	at \$27	M ft. . . .	3.63	98.01
" O P	" 27	" " " "	.37	9.99
" Battens	" 30	" " " "	.20	6.00
Carpenter Work	" 10	" " " "	4.20	42.00
Freight & Haul.	" 10	" " " "	do.	42.00
Earthwork, excavation & back fill.				26.00
Incidental Expenses, etc., 10%				22.40

Estimated Cost	246.40
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479-64. Outlet Gate. 4 x 20 x 5. Right.

Same as at Sta. 470-00.	246.40
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479-64. Outlet Gate. 4 ft. x 20 x 5. Left.

Same as at Sta. 470-00.	246.40
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478-86. Stop Gate. 38 x 20 x 6.

Lumber R W	at \$27	M ft. . . .	10.26	277.02
" O P	" 27	" " " "	.34	9.18
" Weirboards @	50	" " " "	.80	40.00
" Battens	" 30	" " " "	.80	24.00

Totals forward	12.20	\$350.20	\$1,002.59
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Merced Co.

1484

Dos Palos Main Canal.

Brought Forward. . . M ft. . . .	12.20	\$350.20	\$1,002.59
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Carpenter Work	at \$10	" " " "	do.	122.00
Freight & Haul.	" 10	" " " "	do.	122.00
Earthwork, excavation & back fill.				67.00
Incidental Expenses, etc., 10%				66.12

Estimated Cost	727.32
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65-722

481-60. Outlet Gate. 11½ x 20 x 4. Right.

Lumber	at \$27 M ft....	0.60	16.20
Carpenter Work	" 10 " " ...	do.	6.00
Freight & Haul.	" 9 " " ...	do.	5.40
Earthwork			10.00
Incidental Expenses, etc., 10%.....			3.40

Estimated Cost	41.00
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492-85. Bridge. 40 x 16.

Lumber R W	at \$27 M ft....	2.13	57.51
" O P	" 27 " " ...	3.22	86.94
Carpenter Work	" 5 " " ...	5.35	26.75
Freight & Haul.	" 10 " " ...	do.	53.50
Earthwork			15.00
Incidental Expenses, etc., 5%.....			11.98

Estimated Cost	251.68
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493-06. Outlet Gate. 4 x 18 x 5. Left.

Same as at Sta. 470-00.....	246.40
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496-84. Outlet Gate. 4 x 20 x 4. Left.

Lumber	at \$27 M ft....	0.80	21.60
Carpenter Work	" 10 " " ...	do.	8.00
Freight & Haul.	" 9 " " ...	do.	7.20
Earthwork			10.00
Incidental Expenses, etc., 10%.....			5.20

Estimated Cost	52.00
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Total forward	\$2,320.99
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Merced Co.

1485

Dos Palos Main Canal.

Brought Forward	\$2,320.99
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499-24. Head Gate. 16 x 20 x 6. Branch No. 3.

Lumber R W	at \$27 M ft....	6.70	\$180.90
" O P	" 27 " " ...	1.00	27.00
" Weirboards	" 50 " " ...	.11	5.50
" Battens	" 30 " " ...	.50	15.00
Carpenter Work	" 10 " " ...	8.31	83.10
Freight & Haul.	" 10 " " ...	do.	83.10
Earthwork, excavation & back fill.....			37.00
Incidental Expenses, etc., 10%.....			43.16

Estimated Cost	474.76
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501-50. Stop Gate. 38 x 20 x 6.

Same as at Sta. 479-96..... 727.32

501-81. Outlet Gate. 3 x 20 x 4. Left.

Same as at Sta. 496-84..... 52.00

501-90. Outlet Gate. 2 x 20 x 4. Right.

Lumber R W	at \$27 M ft....	0.60	16.20
Carpenter Work	" 10 " " ...	do.	6.00
Freight & Haul.	" 9 " " ...	do.	5.40
Earthwork			10.00
Incidental Expenses, etc., 10%.....			3.40

Estimated Cost 41.00

505-97. Outlet Gate. 4 x 18 x 5. Left.

Same as at Sta. 470-00..... 246.40

505-97. Outlet Gate. 4 x 20 x 4. Right.

Same as at Sta. 496-84..... 52.00

512-37. Outlet Gate. 2 x 20 x 4. Right.

Same as at Sta. 501-90..... 41.00

514-97. Outlet Gate. 1½ x 20 x 4. Left.

Same as at Sta. 481-60..... 41.00

Total forward \$3,996.47

Merced Co.

1486 Dos Palos Main Canal.

Brought Forward \$3,996.47

519-05. Outlet Gate. 5 x 20 x 5. Left.

Same as at Sta. 470-00..... 246.40

519-20. Outlet Gate. 4 x 20 x 4. Right.

Same as at Sta. 496-84 52.00

523-60. Outlet Gate. 1½ x 20 x 4. Left.

Same as at Sta. 481-60..... 41.00

1012 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

525-64. Bridge.

Estimated	250.00
528-22. Outlet Gate. 6 x 18 x 6. Right.	
Same as at Sta. 467-42.....	263.39
531-77. Outlet Gate. 4 x 18 x 5. Left.	
Same as at Sta. 470-00.....	246.40
538-87. Outlet Gate. 6 x 20 x 6. Left.	
Same as at Sta. 467-42.....	263.39
540-05. Stop Gate. 38 x 20 x 8.	
Same as at Sta. 479-86.....	727.32
546-51. Outlet Gate. 2 x 20 x 4. Left.	
Same as at Sta. 501-90.....	41.00
552-48. Outlet Gate. 5 x 18 x 5. Left.	
Same as at Sta. 470-00.....	246.40
555-10. Outlet Gate. 11½ x 20 x 4. Left.	
Same as at Sta. 481-60.....	41.00
359-45. Outlet Gate. 4 x 20 x 6. Left.	
Same as at Sta. 496-84.....	52.00

561-33. Pipe Box.

Estimated	600.00
566-15. Outlet Gate. 6 x 16 x 6. Right.	
Same as at Sta. 467-42.....	263.39
569-31. Outlet Gate. 5 x 16 x 5. Left.	
Same as at Sta. 470-00.....	246.40
Total forward	<u>\$7,576.56</u>

Merced Co.

1487 Dos Palos Main Canal.

Brought Forward \$7,576.56

570-85. Head Gate. 12 x 18 x 5. Branch No. 4.

Same as at Sta. 538-87 337.79

574-57. Outlet Gate. 6 x 20 x 4.

Same as at Sta. 467-42..... 263.39

576-55. Outlet Gate. 5 x 18 x 5. Left.

Same as at Sta. 470-00..... 246.40

579-29. Bridge. 60 x 16.

Lumber R W at \$27 M ft. . . . 1.83 \$49.41

" O P " 27 " " . . . 4.77 128.79

Carpenter Work " 5 " " . . . 6.60 33.00

Freight & Haul. " 10 " " . . . do. 66.00

Earthwork 25.00

Incidental Expenses, etc., 5%..... 15.11

Estimated Cost 317.31

581-70. Outlet Gate 8 x 16 x 5. Left.

Lumber R W at \$27 M ft. . . . 4.28 115.56

" O P " 27 " "50 13.50

" Battens " 30 " "22 6.60

Carpenter Work " 10 " " . . . 5.00 50.00

Freight & Haul. " 10 " " . . . do. 50.00

Earthwork, excavation & back fill..... 28.00

Incidental Expenses, etc., 10%..... 26.36

Estimated Cost 290.02

584-55. Waste Gate. 50 x 18 x 7.

Lumber R W at \$27 M ft. . . . 17.11 461.97

" O P " 27 " "72 19.44

" Weirboards " 50 " " . . . 1.00 50.00

Totals forward " " . . . 18.83 \$531.41 \$9,031.47

Merced Co.

1014 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1488 Dos Palos Main Canal.

Brought Forward	M ft....	18.83	\$531.41	\$9,031.47
Lumber Battens	at \$30 " " ...	1.00	30.00	
Carpenter Work	" 10 " " ...	19.83	198.30	
Freight & Haul.	" 10 " " ...	do.	198.30	
Earthwork, excavation & back fill	.....		60.00	
Incidental Expenses, etc., 10%	.....		101.80	

Estimated Cost 1,119.81

Measuring Gates on Old Outlet Gates.

8—	4 ft. openings at	\$20.00	.....	160.00
7—	6 " " " "	22.00	.....	157.50
1—	8 " " " "	25.00	.....	25.00
1—	12 " " " "	62.50	.....	62.50
1—	16 " " " "	90.00	.....	90.00

Total 495.00

Total Estimated Cost \$10,646.28

585-00. End of Canal.

Dos Palos Main Canal.

Length of Canal in Merced Co. 11,800 ft. 2.23 miles.
Right of Way 156 ft. in width.

Canal Sections.

8,800 ft. Base 35 ft. inside slopes 2 :1.
3,000 " " 40 " " " 2½:1

Merced Co.

1489 Merced County.

Estimated Cost of Dos Palos Main Canal Extension.

Stop and Outlet Gates, Bridges, etc.....	\$9,251.47
Earth Excavation 68,112 yds. @ 10c.....	6,811.20
Engineering and General Superintendence, etc., 10%..	1,606.26

Total \$17,668.93

Right of way 56.5 acres @ —.

List of Stop and Outlet Gates, Bridges, etc., on following pages.

1490

Dos Palos Main Canal Extension.

Station 582-20. Leaves Main Canal.

586-31. Outlet Gate. 4 x 2 x 12. Left.

Lumber R W	at \$27 M ft. . . .	1.00	\$27.00
Carpenter Work	" 8 " " . . .	do.	8.00
Freight & Haul.	" 10 " " . . .	do.	10.00
Earthwork, excavation & back fill.			10.00
Incidental Expenses, etc., 10%			54.94

Estimated Cost	60.50
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590-85. Outlet Gate. 4 x 20 x 5. Right.

Lumber	at \$27 M ft. . . .	0.80	21.60
Carpenter Work	" 10 " " . . .	do.	8.00
Freight & Haul.	" 9 " " . . .	do.	7.20
Earthwork			10.00
Incidental Expenses, etc., 10%			5.20

Estimated Cost	52.00
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594-93. Stop Gate. 32 x 20 x 5.

Lumber R W	at \$27 M ft. . . .	8.85	238.95
" O P	" 27 " "35	9.45
" Weirboards	" 50 " "35	17.50
" Battens	" 30 " " . . .	.65	19.50
Carpenter Work	" 10 " " . . .	10.20	102.00
Freight & Haul.	" 10 " " . . .	do.	102.00
Earthwork, excavation & back fill			60.00
Incidental Expenses, etc., 10%			54.94

Estimated Cost	604.34
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600-25. Outlet Gate. 2 x 20 x 4. Right.

Lumber	at \$27 M ft. . . .	0.60	16.20
Carpenter Work	" 10 " " . . .	do.	6.00
Freight & Haul.	" 9 " " . . .	do.	5.40

Totals forward	\$27.60	\$716.84
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Merced Co.

1491

Dos Palos Main Canal Extension.

Brought Forward	\$27.60	\$716.84
Earthwork	10.00	
Incidental Expenses, etc., 10%	3.40	

Estimated Cost	41.00
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1016 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

602-27. Outlet Gate. 2 x 20 x 4. Left.				
Same as at Sta. 600-25.....				41.00
607-85. Outlet Gate 2 x 20 x 4. Left.				
Same as at Sta. 600-25.....				41.00
608-65. Pipe Box. 4 x 2 x 100.				
Estimated				400.00
611-19. Outlet Gate. 4 x 2 x 12. Left.				
Same as at Sta. 586-31.....				60.50
613-15. Outlet Gate. 4 x 20 x 4. Right.				
Same as at Sta. 590-85.....				52.00
618-72. Outlet Gate. 4 x 2 x 12. Left.				
Same as at Sta. 586-31.....				60.50
627-17. Outlet Gate. 4 x 2 x 12. Left.				
Same as at Sta. 586-31.....				60.50
627-75. Outlet Gate. 4 x 20 x 4. Right.				
Same as at Sta. 590-85				52.00
634-27. Outlet Gate. 2 x 2 x 12. Left.				
Same as at Sta. 602-25.....				41.00
637-55. Outlet Gate. 2 x 2 x 12. Right.				
Same as at Sta. 602-25.....				41.00
643-63. Outlet Gate. 2 x 2 x 12. Left.				
Same as at Sta. 602-25.....				41.00
646-52. Outlet Gate. 2 x 2 x 12. Right.				
Same as at Sta. 602-25.....				41.00
650-00. Outlet Gate. 8 x 4 x 16. Right.				
Lumber R W at \$27 M ft.	1.60	43.20		
Carpenter Work " 8 " "	do.	12.80		
Totals forward " "	1.60	\$56.00	\$1,689.34	
Merced Co.				

149:

Dos Palos Main Canal Extension.

Brought Forward	M ft....	1.60	\$56.00	\$1,689.34
Freight & Haul.	at \$10 " " ...	do.	16.00	
Earthwork, excavation & back fill.....			10.00	
Incidental Expenses, etc., 10%.....			8.20	

Estimated Cost	90.20
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650-62. Outlet Gate. 2 x 2 x 12. Left.

Same as at Sta. 602-25	41.00
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851-03. Stop Gate. 40 x 18 x 5.

Lumber R W	at \$27	M ft....	10.26	277.02
" O P	" 27	" "34	9.18
" Weirboards	" 50	" "80	40.00
" Battens	" 30	" " ...	.80	24.00
Carpenter Work	" 10	" " ...	12.20	122.00
Freight & Haul.	" 10	" " ...	do.	122.00
Earthwork, excavation & back fill			67.00	
Incidental Expenses, etc., 10%.....			66.12	

Estimated Cost	727.32
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636-95. Outlet Gate. 2 x 12 x 3. Left.

Same as at Sta. 600-25.....	41.00
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658-95. Outlet Gate. 2 x 16 x 3. Right.

Same as at Sta. 600-25.....	41.00
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659-55. Bridge.

Estimated	200.00
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660-98. Outlet Gate. 2 x 2 x 12. Left.

Same as at Sta. 602-25.....	41.00
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663-62. Bridge. 32 x 16.

Lumber R W	at \$27	M ft....	1.38	37.26
" O P	" 27	" " ...	2.80	75.60
Carpenter Work	" 5	" " ...	4.18	20.90
Freight & Haul.	10	" " ...	do.	41.80

Totals forward	\$175.56	\$2,870.86
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Merced Co.

1018 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1493 Dos Palos Main Canal Extension.

Brought Forward	\$175.56	\$2,870.86
Earthwork	15.00	
Incidental Expenses, etc., 5%.....	9.52	
	<hr/>	
Estimated Cost		200.08
665-60. Outlet Gate. 2 x 2 x 12. Left.		
Same as at Sta. 602-25.....		41.00
667-68. Outlet Gate. 8 x 3 x 12. Right.		
Estimated		75.00
668-26. Outlet Gate. 4 x 3 x 12. Left.		
Same as at Sta. 586-31.....		60.50
668-98. Stop Gate. 40 x 18 x 5.		
Same as at Sta. 651-03.....		727.32
675-00. Outlet Gate. 2 x 2 x 12. Right.		
Same as at Sta. 602-25.....		41.00
676-38. Outlet Gate. 4 x 16 x 4. Right.		
Same as at Sta. 590-85		52.00
678-07. Outlet Gate. 8 x 3 x 12. Left.		
Estimated		75.00
678-76. Stop Gate. 30 x 18 x 5.		
Same as at Sta. 594-93.....		604.34
683-13. Outlet Gate. 8 x 3 x 12. Left.		
Estimated		75.00
683-75. Outlet Gate. 4 x 3 x 12. Right.		
Same as at Sta. 586-31.....		60.50
686-79. Outlet Gate. 8 x 3 x 12. Left.		
Estimated		75.00

689-55. Outlet Gate. 8 x 3 x 12. Right.

Estimated 75.00

694-91. Outlet Gate. 4 x 2 x 12. Left.

Same as at Sta. 586-31..... 60.50

Total forward \$5,093.10

1494 Dos Palos Main Canal Extension.

Brought Forward \$5,093.10

696-00. Outlet Gate. 4 x 2 x 12. Right.

Same as at Sta. 586-31..... 60.50

686-73. Stop Gate. 40 x 16 x 5.

Same as at Sta. 651-03..... 727.32

703-06. Outlet Gate. 2 x 20 x 3. Left.

Same as at Sta. 600-25..... 41.00

706-79. Outlet Gate. 8 x 2 x 12. Right.

Estimated 75.00

709-74. Outlet Gate. 2 x 2 x 12. Left.

Same as at Sta. 602-25..... 41.00

711-13. Outlet Gate. 2 x 2 x 12. Right.

Same as at Sta. 602-25..... 41.00

717-20. Outlet Gate. 2 x 2 x 12. Right.

Same as at Sta. 602-25..... 41.00

719-91. Bridge.

Estimated 200.00

721-00. Outlet Gate. 4 x 3 x 12. Right.

Same as at Sta. 586-31..... 60.50

723-39. Outlet Gate. 4 x 2 x 12. Left.

Same as at Sta. 586-31 60.50

723-57. Outlet Gate. 6 x 20 x 4. Right.	
Estimated	225.00
724-32. Stop Gate. 30 x 18 x 5.	
Same as at Sta. 594-93.....	604.34
730-30. Outlet Gate. 4 x 20 x 4. Right.	
Same as at Sta. 590-85.....	52.00
733-91. Outlet Gate. 4 x 20 x 4. Right.	
Same as at Sta. 590-85.....	52.00
736-60. Outlet Gate. 4 x 2 x 12. Left.	
Same as at Sta. 586-31	60.50
Total forward	<u>\$7,434.76</u>
Merced Co.	

1495	Dos Palos Main Canal Extension.	
Brought Forward		\$7,434.76
738-91. Outlet Gate. 4 x 20 x 4. Right.		
Same as at Sta. 590-85.....		52.00
741-03. Outlet Gate. 4 x 2 x 12. Left.		
Same as at Sta. 586-31.....		60.50
745-16. Pipe Box. 4 x 2 x 80.		
Estimated		400.00
748-22. Outlet Gate. 4 x 20 x 3. Right.		
Same as at Sta. 590-85.....		52.00
750-09. Outlet Gate. 4 x 2 x 12. Left.		
Same as at Sta. 586-31.....		60.50
752-00. Outlet Gate. 4 x 20 x 4. Left.		
Same as at Sta. 590-85.....		52.00

754-14. Stop Gate. 20 x 16 x 4.

Lumber R W	at \$27 M ft....	5.85	157.95
" O P	" 27 " " ...	1.60	43.20
" Weirboards	" 50 " " ...	.90	45.00
" Battens	" 30 " " ...	.35	10.50
Carpenter Work	" 10 " " ...	8.70	87.00
Freight & Haul.	" 10 " " ...	do.	87.00
Earthwork, excavation & back fill.....			60.00
Incidental Expenses, etc., 10%.....			49.06

Estimated Cost	539.71
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Measuring Gates on Old Outlet Gates.

11-2 ft. openings at \$15.00.....	165.00
13-4 " " " 20.00.....	260.00
7-8 " " " 25.00.....	175.00

Total	600.00
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Total Estimated Cost.....	\$9,251.47
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758-20. End of Canal.

Merced Co.

1496 Dos Palos Main Canal Extension.

Length of Canal 17,600 ft., 3.33 miles.

Right of way 140 ft. in width.

Section of Canal.

Base 35 ft. inside slopes 2:1 Average cut 2.6 ft.

1497 Merced County.

Estimated Cost of Dos Palos Branch Canal No. 1.

Stop and outlet gates, bridges, etc.....	\$944.75
Earth excavation 61,525 yds. at 8¢.....	4,922.00
Engineering and general superintendence, etc., 10%...	586.67
Total	\$6,453.42

Right of way 24.4 acres @ —.

List of stop and outlet gates, bridges, etc., on following pages.

1498

Dos Palos Branch Canal No. 1:

Station 145-00. County Line, Merced & Fresno.

152-01. Bridge. 28 x 16.

Lumber R W	at \$27 M ft. . . .	1.80	\$48.60
" O P	" 27 " " . . .	.50	13.50
Carpenter Work	" 5 " " . . .	2.30	11.50
Freight & Haul.	" 9 " " . . .	do.	20.70
Earthwork, bank and approaches			15.00
Incidental Expenses, etc., 5%			5.46

Estimated Cost

114.77

152-33. Outlet Gate. 6 x 12 x 4. Right.

Lumber R W	at \$27 M ft. . . .	3.42	92.34
" O P	" 27 " " . . .	.38	10.26
Carpenter Work	" 10 " " . . .	3.60	36.00
Freight & Haul.	" 9 " " . . .	do.	34.20
Earthwork, excavation & back fill			30.00
Incidental Expenses, etc., 10%			20.28

Estimated Cost

223.08

153-30. Outlet Gate. 2 x 8 x 3. Right.

Estimated

25.00

153-26. Stop Gate. 24 x 16 x 6. Right.

Lumber R W	at \$27 M ft. . . .	9.00	243.00
" Weirboards	" 50 " " . . .	.40	20.00
" Battens	" 30 " " . . .	.60	18.00
Carpenter Work	" 10 " " . . .	10.00	100.00
Freight & Haul.	" 9 " " . . .	do.	90.00
Earthwork, excavation & back fill			58.00
Incidental Expenses, etc., 10%			52.90

Estimated Cost

581.90

Total Estimated Cost

\$944.75

230-00. End of Canal.

Merced Co.

1499

Dos Palos Branch Canal No. 1.

Length of Canal in Merced County 8,500 ft., 1.61 miles.
Right of way 125 ft. in width.

Canal Section.

Base 20 ft. inside slopes $2\frac{1}{2}:1$ cut 2.70 ft.

1500

Merced County.

Estimated Cost of Dos Palos Branch Canal No. 2.

Stop and outlet gates, bridges, etc.	\$6,966.10
Earth excavation 63,655 yds. @ 8¢	5,093.20
Engineering and general superintendence, etc., 10%	1,205.93
Total	\$13,265.23

Right of way 48.4 acres @ ———.

List of stop and outlet gates, bridges, etc., on following pages.

1501

Dos Palos Branch Canal No. 2.

Station 52-80. County Line, Merced & Fresno.

56-24. Outlet Gate. 4 x 16 x 4. Right.

Lumber R W	at \$27 M ft.	1.00	\$27.00
" O P	" 27 " "	.30	8.10
Carpenter Work	" 10 " "	1.30	13.00
Freight & Haul.	" 9 " "	do.	11.70
Earthwork, excavation & back fill.			20.00
Incidental Expenses, etc., 10%			7.98

Estimated Cost \$87.78

56-35. Outlet Gate. 4 x 16 x 4. Left.

Same as at Sta. 56-24. 87.78

58-00. Outlet Gate. 4 x 10 x 14. Right.

Estimated 70.00

58-08. Bridge. 16 x 12.

Lumber R W	at \$27 M ft.	1.50	40.50
" O P	" 27 " "	1.50	40.50
Carpenter Work	" 5 " "	3.00	15.00
Freight & Haul.	" 9 " "	do.	27.00
Earthwork			15.00
Incidental Expenses, etc., 5%			6.90

Estimated Cost 144.90

58-40. Outlet Gate. 4 x 10 x 5. Right.

Same as at Sta. 54-24..... 87.78

59-03. Outlet Box. 3 x 3 x 5.

Estimated 25.00

59-36. Stop Gate. 16 x 16 x 6.

Same as at Sta. 116-10..... 467.94

74-20. Outlet Gate. 4 x 12 x 4. Left.

Same as at Sta. 56-24..... 87.78

Total forward \$1,058.96

Merced Co.

1502

Dos Palos Branch Canal No. 2.

Brought Forward \$1,058.96

74-31. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 56-24..... 87.78

74-59. Outlet Gate. 4 x 12 x 4. Left.

Same as at Sta. 56-24..... 87.78

74-87. Stop Gate. 16 x 16 x 6.

Same as at Sta. 116-10..... 467.94

75-39. Outlet Gate. 5.5 x 12 x 4. Left.

Lumber R W	at \$27 M ft....	3.00	\$81.00
Carpenter Work	" 10 " "....	do.	30.00
Freight & Haul.	" 9 " "....	do.	27.00
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			16.80

Estimated Cost 184.80

81-10. Outlet Gate. 2 x 12 x 3. Left.

Estimated 30.00

86-64. Outlet Gate. 2 x 12 x 3. Left.

Same as at Sta. 81-10..... 30.00

85-52. Bridge. 16 x 22.

Estimated	175.00
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88-93. Outlet Gate. 5.5 x 12 x 4. Left.

Same as at Sta. 75-39.....	184.80
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90-25. Outlet Box. 2 x 2 x 14. Right.

Estimated	30.00
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90-38. Stop Gate. 16 x 16 x 6.

Same as at Sta. 116-10.....	467.94
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95-12. Outlet Gate. 2 x 12 x 3. Left.

Same as at Sta. 81-10.....	30.00
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108-14. Outlet Gate. 2 x 12 x 3. Left.

Same as at Sta. 81-10.....	30.00
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Total forward	<u>\$2,865.00</u>
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Merced Co.

1503 Dos Palos Branch Canal No. 2.

Brought Forward	\$2,865.00
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111-30. Outlet Gate. 2 x 12 x 3. Left.

Same as at Sta. 81-10.....	30.00
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114-80. Outlet Box. 2 x 2 x 14. Left.

Estimated	30.00
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114-98. Bridge. 18 x 16.

Same as at Sta. 58-08.....	144.90
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115-27. Outlet Box. 2 x 2 x 14. Left.

Estimated	25.00
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114-37. Outlet Gate. 5.5 x 12 x 4. Left.

Same as at Sta. 75-39.....	184.80
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66-722

115-37. Outlet Gate. 5.5 x 12 x 4. Right.

Same as at Sta. 75-39..... 184.80

115-94. Outlet Box. 2 x 2 x 8. Right.

Estimated 20.00

116-10. Stop Gate. 16 x 16 x 6.

Lumber R W	at \$27 M ft....	7.20	\$194.40
" Weirboards	" 50 " " ...	.35	17.50
" Battens	" 30 " " ...	.45	13.50
Carpenter Work	" 10 " " ...	8.00	80.00
Freight & Haul.	" 9 " " ...	do.	72.00
Earthwork, excavation & back fill.....			48.00
Incidental Expenses, etc., 10%.....			42.54

Estimated Cost \$467.94 467.94

122-58. Outlet Box. 2 x 2 x 12. Right.

Estimated 25.00 25.

128-23. Outlet Gate. 5.5 x 12 x 5.

Same as at Sta. 75-39..... 184.80 184.80

141-10. Outlet Gate. 5.5 x 12 x 5. Right.

Same as at Sta. 75-39..... 184.80
184.80

Total forward \$4,347.04

Merced Co.

1504 Dos Palos Branch Canal No. 2.

Brought Forward \$4,347.04

141-45. Bridge. 16 x 16.

Same as at Sta. 58-08..... 144.90

142-13. Stop Gate. 16 x 16 x 6.

Same as at Sta. 116-10..... 467.94

167-54. Outlet Gate. 5.5 x 12 x 5. Right.

Same as at Sta. 75-39..... 184.80

169-88. Stop Gate. 16 x 16 x 6.

Same as at Sta. 116-10..... 467.94

192-13. Stop Gate. 16 x 16 x 7.

Same as at Sta. 116-10..... 467.94

193-43. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta. 58-40..... 72.60

235-00. Stop Gate. 16 x 12 x 4.

Same as at Sta. 116-10..... 467.94

Total estimated Cost.....

238-00. End of canal.

Measuring Gates on Old Outlet Gates.

6-2 ft. Openings	@ \$15.00	\$90.00
6-4 " "	" 20.00	120.00
6-5.5 ft. "	" 22.50	135.00

Total	345.00
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Total Estimated Cost.....	\$6,966.10
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Dos Palos Branch Canal No. 2.

Length of Canal in Merced Co. 18,520 ft. 3.5 miles.

Right of way 114 ft. in width.

Section of Canal.

Base 20 ft. inside slopes $2\frac{1}{2}:1$ cut 2.7 ft.

Merced Co.

1505

Merced County.

Estimated Cost of Dos Palos Branch Canal No. 3.

Stop and outlet gates, bridges, etc.....	\$8,930.53
Earth excavation 58,571 yds. @ 8¢.....	4,685.68
Engineering and general superintendence, etc., 10%..	1,361.62

Total	\$14,977.83
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Right of way 58.3 acres @ —.

List of stop and outlet gates, bridges, etc., on following pages.

1028 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1506 Dos Palos Branch Canal No. 3.

Station 0-00. Equals Sta. 499-24. Main Canal.

6-86. Outlet Gate. 4 x 12 x 5. Left.

Lumber R W	at \$27 M ft....	1.00	\$27.00
" O P	" 27 " " ...	.30	8.10
" Battens	" 30 " " ...	.20	6.00
Carpenter Work	" 10 " " ...	1.50	15.00
Freight & Haul.	" 10 " " ...	do.	15.00
Incidental Expenses, 10%	.....		9.61

Estimated Cost 105.71

7-07. Outlet Gate. 4 x 20 x 4. Right.

Lumber	at \$27 M ft....	0.80	21.60
Carpenter Work	" 10 " " ...	do.	8.00
Freight & Haul.	" 9 " " ...	do.	7.20
Earthwork	.....		10.00
Incidental Expenses, etc., 10%	.....		5.20

Estimated Cost 52.00

7-15. Outlet Gate. 4 x 12 x 5. Right.

Same as at Sta. 6-86 105.71

11-42. Outlet Gate. 4 x 12 x 5. Right.

Same as at Sta. 6-85 105.71

15-00. Outlet Gate. 4 x 16 x 4. Right.

Same as at Sta. 6-86 105.71

18-77. Outlet Gate. 4 x 12 x 5. Left.

Same as at Sta. 6-86 105.71

22-97. Outlet Gate. 4 x 20 x 3.

Same as at Sta. 7-07 52.00

25-42. Bridge 24 x 16.

Lumber R W	at \$27 M ft....	1.75	47.25
" O P	" 27 " " ...	2.35	63.45

Totals forward " " ... 4.10 \$110.70 \$632.55

Merced Co.

1507

Dos Palos Branch Canal No. 3.

Brought Forward	M ft....	4.10	\$110.70	\$632.55
Carpenter Work	at \$5 " " ...	do.	20.50	
Freight & Haul.	" 10 " " ...	do.	41.00	
Earthwork			15.00	
Incidental Expenses, etc., 5%			9.36	

Estimated Cost 196.56

25-81. Outlet Gate. 4 x 16 x 4. Right.

Same as at Sta. 6-86..... 105.71

26-09. Stop Gate. 16 x 16 x 7.

Lumber R W	at \$27 M ft....	7.05	190.35	
" O P	" 27 " " ...	1.20	32.40	
" Weirboards	" 50 " " ...	.45	17.50	
" Battens	" 30 " " ...	.45	13.50	
Carpenter Work	" 10 " " ...	9.05	90.50	
Freight & Haul.	" 10 " " ...	do.	90.50	
Earthwork, excavation & back fill.....			50.00	
Incidental Expenses, etc., 10%			48.47	

Estimated Cost 533.22

39-00. Outlet Gate. 4 x 12 x 5. Right.

Same as at Sta. 6-86..... 105.71

39-00. Outlet Gate. 2 x 2 x 10. Left.

Lumber R W	at \$27 M ft....	.40	10.80	
Carpenter Work	" 8 " " ...	do.	3.20	
Freight & Haul.	" 10 " " ...	do.	4.00	
Earthwork, excavation & back fill.....			8.00	
Incidental Expenses, etc., 10%			2.60	

Estimated Cost 28.60

41-50. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 7-07..... 52.00

Total forward \$1,654.35

Merced Co.

1030 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1508 Dos Palos Branch Canal No. 3.

Brought Forward \$1,654.35

43-50. Outlet Gate. 4 x 16 x 4. Left.

Same as at Sta. 6-86..... 105.71

46-50. Outlet Gate. 2 x 6 x 4. Right.

Lumber	at \$27	M ft. . . .	0.60	16.20
Carpenter Work	" 10	" " . . .	do.	6.00
Freight & Haul.	" 9	" " . . .	do.	5.40
Earthwork				10.00
Incidental Expenses, etc., 10%				3.40

Estimated Cost 41.00

48-51. Outlet Gate. 2 x 20 x 3. Left.

Same as at Sta. 46-50..... 41.00

51-31. Outlet Gate. 4 x 16 x 4. Left.

Lumber R W	at \$27	M ft. . . .	1.25	33.75
" O P	" 27	" " . . .	.30	8.10
" Battens	" 30	" " . . .	.20	6.00
Carpenter Work	" 10	" " . . .	1.75	17.50
Freight & Haul.	" 10	" " . . .	do.	17.50
Earthwork, excavation & back fill.....				26.00
Incidental Expenses, etc., 10%				10.88

Estimated Cost 119.73

52-43. Bridge. 24 x 14.

Same as at Sta. 25-42..... 196.56

52-70. Outlet Gate. 4 x 16 x 4. Left.

Same as at Sta. 51-31..... 119.73

53-61. Outlet Gate. 4 x 10 x 4. Right

Same as at Sta. 6-86 105.71

53-91. Stop Gate. 16 x 16 x 7.

Lumber R W	at \$27	M ft. . . .	7.07	190.89
" O P	" 27	" " . . .	.13	3.51

Totals forward " " . . . 7.20 \$194.40 \$2,383.79

Merced Co.

1509

Dos Palos Branch Canal No. 3.

Brought Forward	M ft. . . .	7.20	\$194.40	\$2,383.79
Lumber Weirboards	at \$50 " " . . .	.35	17.50	
" Battens	" 30 " " . . .	.45	13.50	
Carpenter Work	" 10 " " . . .	8.00	80.00	
Freight & Haul.	do.		80.00	
Earthwork, excavation & back fill.			48.00	
Incidental Expenses, etc., 10%			43.34	

Estimated Cost 476.74

62-08. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 46-50 41.00

67-53. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 7-07 52.00

76-41. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 7-07 52.00

77-55. Outlet Gate. 4 x 12 x 4. Right.

Lumber R W	at \$27 M ft. . . .	.90	24.30	
Carpenter Work	" 10 " " . . .	do.	9.00	
Freight & Haul.	" 10 " " . . .	do.	9.00	
Earthwork, excavation & back fill.			20.00	
Incidental Expenses, etc., 10%			6.23	

Estimated Cost 68.53

77-55. Outlet Gate. 4 x 12 x 4. Left.

Same as at Sta. 77-55 Right 68.53

82-48. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 7-07 52.00

87-71. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 7-07 52.00

90-56. Bridge. 32 x 16.

Lumber R W	at \$27 M ft. . . .	.60	16.20	
" O N P	" 27 " " . . .	2.40	64.80	

Totals forward " " . . . 3.00 \$81.00 \$3,246.59

Merced Co.

1032 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1510 Dos Palos Branch Canal No. 3.

Brought Forward	M ft....	3.00	\$81.00	\$3,246.59
Carpenter Work	at \$5 " "...	do.	15.00	
Freight & Haul.	" 10 " "...	do.	30.00	
Earthwork	.....		15.00	
Incidental Expenses, etc., 5%	.....		7.05	

Estimated Cost 148.05

96-00. Outlet Gate. 6 x 14 x 5.5. Right.

Lumber R W	at \$27 M ft....	3.00	81.00	
" O P	" 27 " "...	.38	10.26	
" Battens	" 30 " "...	.20	6.00	
Carpenter Work	" 10 " "...	3.58	35.80	
Freight & Haul.	" 10 " "...	do.	35.80	
Earthwork, excavation & back fill.....			30.00	
Incidental Expenses, etc., 10%	.....		19.98	

Estimated Cost 218.74

103-07. Outlet Gate. 6 x 12 x 5.5. Right.

Same as at Sta. 96-00..... 218.74

104-56. Bridge. 32 x 16.

Same as at Sta. 90-56..... 148.05

109-74. Outlet Gate. 3 x 20 x 3. Right.

Same as at Sta. 7-07..... 52.00

111-25. Outlet Gate. 2 x 12 x 3. Left.

Estimated 25.00

113-22. Stop Gate. 16 x 16 x 6.

Same as at Sta. 53-91..... 476.74

118-24. Outlet Gate. 6 x 12 x 5. Right.

Same as at Sta. 96-00..... 218.74

131-44. Outlet Gate. 8 x 16 x 6. Right.

Lumber R W	at \$27 M ft....	4.28	115.56	
" O P	" 27 " "...	.50	13.50	

Totals forward..... 4.78 \$129.06 \$4,752.65

Merced Co.

1511

Dos Palos Branch Canal No. 3.

Brought Forward	M ft. . . .	4.78	\$129.06	\$4,752.65
Lumber Battens	at \$30 " " . . .	.22	6.60	
Carpenter Work	" 10 " " . . .	5.00	50.00	
Freight & Haul.	" 10 " " . . .	do.	50.00	
Earthwork, excavation & back fill.			30.00	
Incidental Expenses, etc., 10%			30.66	

Estimated Cost	296.32
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132-11. Stop Gate. 16 x 16 x 6.

Same as at Sta. 53-91	476.74
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136-24. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 46-50	41.00
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142-32. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 46-50	41.00
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145-71. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 46-50	41.00
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153-81. Outlet Gate. 3 x 20 x 3. Right.

Same as at Sta. 7-07	52.00
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156-00. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 7-07	52.00
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157-30. Outlet Gate. 8 x 14 x 5.

Same as at Sta. 131-44	296.32
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167-72. Outlet Gate. 3 x 16 x 4. Right.

Estimated	35.00
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171-00. Outlet Gate. 10 x 16 x 6. Right.

Lumber R W	at \$27 M ft. . . .	5.10	137.70
" O P	" 27 " "70	18.90
" Weirboards	" 50 " "18	9.00
" Battens	" 30 " " . . .	.42	12.60
Carpenter Work	" 10 " " . . .	6.40	64.00
Freight & Haul.	" 10 " " . . .	do.	64.00

Totals forward	\$306.20	\$6,084.03
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Merced Co.

1034 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1512 Dos Palos Branch Canal No. 3.

Brought Forward	306.20	\$6,084.03
Earthwork, excavation & back fill.....	30.00	
Incidental Expenses, etc., 10%	33.62	

Estimated Cost	369.82
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171-64. Stop Gate. 16 x 16 x 6.

Same as at Sta. 53-91.....	476.74
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176-39. Pipe Box. 4 x 2 x 70.

Estimated	250.00
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178-79. Outlet Gate. 4 x 12 x 4. Right.

Same as at Sta.	105.71
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183-91. Bridge. 16 x 16.

Lumber R W	at \$27 M ft....	1.52	41.04
" O P	" 27 " " ...	1.53	41.31
Carpenter Work	" 5 " " ...	3.05	15.25
Freight & Haul.	" 10 " " ...	do.	30.50
Earthwork			15.00
Incidental Expenses, etc., 5%.....			7.15

Estimated Cost	150.25
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184-31. Outlet Gate. 5 x 12 x 3. Left.

Estimated	200.00
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184-40. Outlet Gate. 6 x 12 x 4. Right

Same as at Sta. 96-00.....	218.74
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185-80. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 46-50.....	41.00
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187-19. Stop Gate. 16 x 16 x 6.

Same as at Sta. 53-91	476.74
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Total Est. Cost Forw'd.....	\$8,373.03
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219-00. End of Canal.

Merced Co.

1513 Dos Palos Branch Canal No. 3.
 Brought Forward \$8,373.03

Measuring Gates on Old Outlet Gates.

9—	2	ft.	openings	at	\$15.00	.....	135.00
11—	4	"	"	"	20.00	.....	220.00
4—	6	"	"	"	22.50	.....	90.00
1—	10	"	"	"	62.50	.....	62.50
2—	8	"	"	"	25.00	.....	50.00

Total 557.50

Total Estimated Cost \$8,930.53

Dos Palos Branch Canal No. 3.

Length of Canal in Merced County, 21,900 Ft., 4.14 miles.
 Right of way 116 feet in width.

Canal Section.

Base 20 ft. inside slope $2\frac{1}{2}:1$ average cut 2.7 ft.
 Merced Co.

1514 Merced County.

Estimated Cost of Dos Palos Branch Canal No. 4.

Stop and Outlet Gates, Bridges, etc.	.....	\$7,120.05
Earth Excavation 19,344 yds. @ 7¢	.....	1,354.08
Engineering and General Superintendence, etc., 10%	.....	847.54

Right of way 35.9 acres @ —.

List of Stop and Outlet Gates, Bridges, etc., on following pages.

1515 Dos Palos Branch Canal No. 4.

0-00. Sta. 570-85. Dos Palos Main Canal.

3-23. Outlet Gate. 2 x 20 x 3. Right.

Lumber R W	at \$27 M ft.	0.60	\$16.20
Carpenter Work	" 10 " "	do.	6.00
Freight & Haul.	" 9 " "	do.	5.40
Earthwork	.....		10.00
Incidental Expenses, etc., 10%	.....		3.40

Estimated Cost 41.00

1035

1036 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

3-83. Outlet Gate. 2 x 20 x 3. Left.	
Same as at Sta. 3-23.....	41.00
7-76. Outlet Gate. 2 x 20 x 3. Right.	
Same as at Sta. 3-23.....	41.00
10-28. Outlet Gate. 2 x 20 x 3. Left.	
Same as at Sta. 3-23.....	41.00
11-79. Outlet Gate. 2 x 20 x 3. Right.	
Same as at Sta. 3-23.....	41.00
11-90. Outlet Gate. 2 x 20 x 3. Left.	
Same as at Sta. 3-23.....	41.00
14-19. Outlet Gate. 2 x 20 x 3. Left.	
Same as at Sta. 3-23.....	41.00
14-00. Stop Gate. 12 x 16 x 5.	
Lumber R W at \$27 M ft....	5.92 159.84
" Battens " 30 " " ...	.40 12.00
" Weirboards @ 50 " " ...	.18 9.00
Carpenter Work " 10 " " ...	6.50 65.00
Freight & Haul. " 10 " " ... do.	65.00
Earthwork, excavation & back fill.....	20.00
Incidental Expenses, etc., 10%.....	32.96
Estimated Cost	363.80
Total Forward	\$650.80

Merced Co.

1516 Dos Palos Branch Canal No. 4.	
Brought Forward	\$650.80
20-14. Outlet Gate. 2 x 20 x 3. Left.	
Same as at Sta. 3-23.....	41.00

20-30. Bridge. 12 x 16.

Lumber R W	at \$27 M ft....	.60	\$16.20
" O P	" 27 " " ...	1.40	37.80
Carpenter Work	" 5 " " ...	2.00	10.00
Freight & Haul.	" 10 " " ...	do.	20.00
Earthwork	.....		20.00
Incidental Expenses, etc., 5%	.....		5.20

Estimated Cost 109.20

21-04. Outlet Gate. 4 x 20 x 3. Right.

Lumber	at \$27 M ft....	0.80	21.60
Carpenter Work	" 10 " " ...	do.	8.00
Freight & Haul.	" 9 " " ...	do.	7.20
Earthwork	.....		10.00
Incidental Expenses, etc., 10%	.....		5.20

Estimated Cost 52.00

21-36. Outlet Gate. 3 x 18 x 3. Left.

Same as at Sta. 3-23..... 41.00

24-89. Outlet Gate. 4 x 20 x 4. Right.

Same as at Sta. 21-04..... 52.00

27-20. Outlet Gate. 3 x 18 x 3. Left.

Same as at Sta. 3-23..... 41.00

30-50. Bridge.

Same as at Sta. 20-30..... 109.20

30-60. Outlet Gate. 4 x 12 x 3. Right.

Lumber	at \$27 M ft....	1.30	35.10
Carpenter Work	" 10 " " ...	do.	13.00
Freight & Haul.	" 9 " " ...	do.	11.70

Totals forward \$59.80 \$1,096.20

Merced Co.

1517 Dos Palos Branch Canal No. 4.

Brought Forward	\$59.80	\$1,096.20
Earthwork	20.00	
Incidental Expenses, etc., 10%	8.00	

Estimated Cost 87.80

33-00. Outlet Gate. 4 x 16 x 4. Left.

Same as at Sta. 30-60..... 87.80

35-72. Outlet Gate. 3 x 20 x 3. Right.

Same as at Sta. 3-23..... 41.00

36-86. Bridge. 20 x 24.

Lumber R W	at \$27	M ft....	.1.00	27.00
" O P	" 27	" "....	2.50	67.50
Carpenter Work	" 5	" "....	3.50	17.50
Freight & Haul.	" 10	" "....	do.	35.00
Earthwork				20.00
Incidental Expenses, etc., 5%				8.35

Estimated Cost 175.35

37-17. Outlet Gate. 4 x 16 x 4. Right.

Same as at Sta. 30-60..... 87.80

37-66. Outlet Gate. 3 x 18 x 3. Left.

Same as at Sta. 3-23..... 41.00

37-96. Stop Gate. 12 x 16 x 5.5.

Same as at Sta. 14-00..... 363.80

44-33. Outlet Gate. 3 x 20 x 3. Left.

Same as at Sta. 3-23..... 41.00

54-75. Outlet Gate. 2 x 20 x 3. Right.

Same as at Sta. 3-23..... 41.00

55-00. Outlet Gate. 5 x 16 x 3. Left.

Estimated 150.00

57-61. Outlet Gate. 2 x 20 x 3. Left.

Same as at Sta. 3-23..... 41.00

Total forward \$2,253.75

Merced Co.

1518

Dos Palos Branch Canal No. 4.

Brought Forward	\$2,253.75
58-90. Outlet Gate. 5 x 16 x 4. Right.	
Estimated	150.00
59-44. Stop Gate. 12 x 6 x 6.	
Same as at Sta. 14-00.....	363.80
65-90. Bridge. 12 x 24.	
Estimated	130.00
66-24. Outlet Gate. 6 x 20 x 4. Right.	
Estimated	250.00
69-50. Outlet Gate. 2 x 18 x 3. Left.	
Same as at Sta. 3-23.....	41.00
69-83. Outlet Gate. 2 x 8 x 3. Right.	
Estimated	25.00
70-00. Bridge. 12 x 24.	
Estimated	130.00
72-41. Outlet Gate. 2 x 18 x 2. Left.	
Same as at Sta. 3-23.....	41.00
75-87. Outlet Gate. 6 x 16 x 4. Right.	
Estimated	200.00
76-01. Outlet Gate. 2 x 18 x 2. Left.	
Same as at Sta. 3-23.....	41.00
76-61. Stop Gate. 12 x 16 x 5.	
Same as at Sta. 14-00.....	363.80
81-46. Outlet Gate. 2 x 18 x 2. Left.	
Same as at Sta. 3-23.....	41.00

1040 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

84-08. Outlet Gate. 2 x 18 x 3. Right.	
Same as at Sta. 3-23.....	41.00
88-12. Outlet Gate. 2 x 18 x 3. Left.	
Same as at Sta. 3-23.....	41.00
Total forward	<u>\$4,112.35</u>

Merced Co.

1519 Dos Palos Branch Canal No. 4.

Brought Forward	\$4,112.35
88-25. Outlet. 5 x 16 x 4. Right.	
Estimated	150.00
91-45. Outlet Gate. 2 x 18 x 3. Right.	
Same as at Sta. 3-23.....	41.00
91-85. Outlet Gate. 2 x 18 x 3. Left.	
Same as at Sta. 3-23.....	41.00
92-04. Stop Gate. 12 x 16 x 5.	
Same as at Sta. 14-00.....	363.80
95-50. Outlet Gate. 2 x 18 x 3. Left.	
Same as at Sta. 3-23.....	41.00
96-18. Outlet Gate. 2 x 18 x 3. Right.	
Same as at Sta. 3-23.....	41.00
97-79. Outlet Gate. 2 x 18 x 3. Right.	
Same as at Sta. 3-23.....	41.00
102-37. Bridge. 16 x 20.	
Estimated	125.00
102-53. Outlet Gate. 2 x 18 x 3. Left.	
Same as at Sta. 3-23.....	41.00

THE COUNTY OF STANISLAUS, ETC., ET AL.

1041

102-77. Outlet Gate. 5 x 16 x 4. Right.

Estimated	150.00
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105-45. Outlet Gate. 2 x 16 x 3. Left.

Same as at Sta. 3-23.....	41.00
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110-09. Outlet Gate. 2 x 18 x 3. Left.

Same as at Sta. 3-23.....	41.00
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110-19. Outlet Gate. 2 x 18 x 3. Right.

Same as at Sta. 3-23.....	41.00
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116-95. Outlet Gate. 3 x 18 x 3. Left.

Same as at Sta. 3-23.....	41.00
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Total forward	<u>\$5,311.15</u>
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Merced Co.

1520 Dos Palos Branch Canal No. 4.

Brought Forward	\$5,311.15
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117-00. Outlet Gate. 5 x 18 x 4. Right.

Estimated	180.00
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121-59. Stop Gate. 12 x 16 x 5.

Same as at Sta. 14-00.....	363.80
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122-60. Outlet Gate. 2 x 18 x 3. Left.

Same as at Sta. 3-93.....	41.00
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124-92. Outlet Gate. 2 x 18 x 3. Right.

Same as at Sta. 3-23.....	41.00
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125-00. Outlet Gate. 2 x 18 x 3. Left.

Same as at Sta. 3-23.....	41.00
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127-22. Outlet Gate. 4 x 18 x 4. Right.

Same as at Sta. 21-04.....	52.00
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130-55. Bridge. 12 x 20.

Estimated	120.00
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133-00. Outlet Gate. 2 x 10 x 4. Right.

Estimated	25.00
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136-00. Stop Gate. 12 x 16 x 5.

Same as at Sta. 14-00.....	363.80
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153-54. Stop Gate. 12 x 16 x 5.

Same as at Sta. 14-00.....	363.80
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156-25. End of Canal.

Measuring Gates on Old Outlet Gates.

3-4 ft. openings at \$20.00.....	60.00	
7-6 " " " 22.50.....	157.50	217.50
Total		\$7,120.05

Merced Co.

1521

Dos Palos Branch Canal No. 4.

Length of Canal in Merced County 15,625 ft. 2.96 miles.

Right of Way 100 feet in width.

Canal Section.

Base 10 feet inside slopes 2:1 Average Cut 2.3 feet.

1522

Merced County.

Estimated Cost of Outside Canal.

Stop and outlet gates, bridges, etc.....	\$29,914.52
Earth excavation 445,225 yds. @ 10¢.....	44,522.50
" " side canal 62,800 yds. at 7¢.....	4,396.00
Engineering and general superintendence, etc., 10%...	7,883.30
Total	\$86,716.32

Right of way 367.3 acres @ —.

List of stop and outlet gates, bridges, etc., on following pages.

1523

Outside Canal.

Station 1024-49. Bridge. 70 x 20.

Lumber R W	at \$27	M ft....	1.88	\$50.76
" O P	" 27	" " ...	6.42	173.34
Carpenter Work	" 5	" " ...	8.30	41.50
Freight & Haul.	" 12	" " ...	do.	10.00
Earthwork				25.00
Incidental Expenses, etc., 5%.....				15.03

Estimated Cost	\$315.63
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1024-49. Bridge. 20 x 8. Side Canal.

Lumber R W	at \$27	M ft....	.20	5.40
" O P	" 27	" "72	19.44
Carpenter Work	" 5	" "92	4.60
Freight & Haul.	" 12	" " ...	do.	11.04
Earthwork				2.00
Incidental Expenses, etc., 10%.....				4.24

Estimated Cost	46.72
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1105-50. Stop Gate. 10 x 10 x 4. Side Canal.

Lumber R W	at \$27	M ft....	2.43	65.61
" O P	" 27	" "24	6.48
Carpenter Work	" 10	" " ...	2.67	26.70
Freight & Haul.	" 12	" " ...	do.	32.04
Earthwork, excavation & back fill.....				14.00
Incidental Expenses, etc., 10%.....				14.48

Estimated Cost	159.31
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1106-07. Outlet Gate. 10 x 18 x 6.

Lumber R W	at \$27	M ft....	5.12	138.24
" O P	" 27	" "72	19.44

Total forward	5.84	\$157.68	\$521.66
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Merced Co.

1524

2. Outside Canal.

Brought Forward	M ft....	5.84	\$157.68	\$521.66
Lumber Weirboards @ \$50	" "18	9.00	
" Battens at 30	" " ...	.40	12.00	
Carpenter Work	" 10	" " ...	6.42	64.20
Freight & Haul.	" 12	" " ...	do.	77.04
Earthwork, excavation & back fill.....				30.00
Incidental Expenses, etc., 10%.....				34.99

Estimated Cost	384.91
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1106-07. Bulkhead. 50 feet. Side Canal.

Lumber R W	at \$27 M ft....	1.76	47.52
Carpenter Work	" 5 " " ... do.		8.80
Freight & Haul.	" 12 " " ...		21.12
Earthwork		5.00
Incidental Expenses, etc., 5%		4.12

Estimated Cost	86.56
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1106-50. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.....	159.31
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1107-65. Stop Gate. 60 x 18 x 6.

Lumber R W	at \$27 M ft....	14.06	379.62
" O P	" 27 " "44	11.88
" Weirboards @	50 " "76	38.00
" Battens	at 30 " " ...	1.00	30.00
Carpenter Work	" 10 " " ...	16.26	162.60
Freight & Haul.	" 12 " " ... do.		195.10
Earthwork, excavation & back fill.....			70.00
Incidental Expenses, etc., 10%		88.67

Estimated Cost	975.87
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Total forward	\$2,128.31
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Merced Co.

1525 3. Outside Canal.

Brought Forward	\$2,128.31
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1222-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.....	159.31
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1226-02. Outlet Gate. 10 x 18 x 6.

Same as at Sta. 1106-07.....	384.91
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1226-02. Bulkhead. 30 feet. Side Canal.

Same as at Sta. 1106-07.....	86.56
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1227-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.....	159.31
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1227-49. Stop Gate. 60 x 18 x 6.

Same as at Sta. 1107-65..... 975.87

1296-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50..... 159.31

1297-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50..... 159.31

1341-84. Outlet Gate. 6 x 18 x 8.

Same as at Sta. 1106-07..... 384.91

1368-89. Bridge. 70 x 20.

Same as at Sta. 1024-49..... 315.63

1368-89. Bridge. 20 x 8. Side Canal.

Lumber R W	at \$27 M ft....	.20	\$5.40
" O P	" 27 " "....	.72	19.44
Carpenter Work	" 5 " "....	.92	4.60
Freight & Haul.	" 12 " "....	do.	11.04
Earthwork	.....		2.00
Incidental Expenses, etc., 10%	.....		4.24

Estimated Cost 46.72

Total forward \$4,960.15

Merced Co.

1526

4. Outside Canal.

Brought Forward \$4,960.15

1392-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50..... 159.31

1392-76. Outlet Gate. 10 x 22 x 6.

Lumber R W	at \$27 M ft....	5.63	\$152.01
" O P	" 27 " "....	.72	19.44
" Weirboards @	50 " "....	.13	9.00
" Battens	at 30 " "....	.50	15.00
Carpenter Work	" 10 " "....	7.03	70.30
Freight & Haul.	" 12 " "....	do.	84.36
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			38.01

Estimated Cost 418.12

1392-76. Bulkhead. 50 ft. Side Canal.			
Same as at Sta. 1106-07.....			86.56
1394-32. Stop Gate. 60 x 18 x 6.			
Same as at Sta. 1107-65.....			975.87
1408-00. Stop Gate. 10 x 10 x 4. Side Canal.			
Same as at Sta. 1105-50.....			159.31
1442-00. Stop Gate. 10 x 10 x 4. Side Canal.			
Same as at Sta. 1105-50.....			159.31
1459-75. Outlet Gate. 10 x 18 x 6. Left Bank.			
Same as at Sta. 1106-07.....			384.91
1475-50. Outlet Gate. 10 x 18 x 6.			
Same as at Sta. 1106-07.....			384.91
1482-00. Stop Gate. 10 x 10 x 4. Side Canal.			
Same as at Sta. 1105-50.....			159.31
1490-97. Bridge. 80 x 24.			
Lumber R W	at \$27 M ft....	3.05	82.35
Totals forward	" " ...	3.05	82.05
			\$7,847.76

Merced Co.

1527

5. Outside Canal.

Brought Forward	M ft....	3.05	\$82.35	\$7,847.76
Lumber O P	at \$27 " " ...	9.38	253.26	
Carpenter Work	" 5 " " ...	12.43	62.15	
Freight & Haul.	" 15 " " ...	do.	149.16	
Earthwork			25.00	
Incidental Expenses, etc., 5%			28.59	
Estimated Cost				600.51

1490-97. Bridge. 20 x 8. Side Canal.

Same as at Sta. 1368-89.....	46.72
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1521-00. Stop Gate. 10 x 10 x 4. Side Canal.	
Same as at Sta. 1105-50.....	159.31
1532-30. Outlet Gate. 10 x 18 x 6. Left.	
Same as at Sta. 1106-07.....	384.91
1532-58. Outlet Gate. 10 x 22 x 6.	
Same as at Sta. 1392-76.....	418.12
1532-58. Bulkhead. 50 feet. Side Canal.	
Same as at Sta. 1106-07.....	86.56
1534-23. Stop Gate. 60 x 16 x 6.	
Same as at Sta. 1107-65.....	975.87
1543-50. Stop Gate. 10 x 10 x 4. Side Canal.	
Same as at Sta. 1105-50.....	159.31
1552-00. Stop Gate. 10 x 10 x 4. Side Canal.	
Same as at Sta. 1105-50.....	159.31
1569-82. Bridge. 80 x 24.	
Lumber R W at \$27 M ft....	3.05 82.35
" O P " 27 " " ...	9.38 253.26
Carpenter Work " 5 " " ...	12.43 62.15
Totals forward " " ...	12.43 \$397.76 \$10,838.38

Merced Co.

1528

6. Outside Canal.

Brought forward	M ft....	12.43	\$397.76	\$10,838.38
Freight & Haul.	at \$12 " " ...	do.	149.16	
Earthwork			25.00	
Incidental Expenses, etc., 5%.....			28.59	
Estimated Cost				600.51

1575-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50..... 159.31

1607-61. Bridge. 100 x 24.

Lumber R W	at \$27 M ft. . . .	3.90	105.30
" O P	" 27 " " . . .	11.60	313.20
Carpenter Work	" 5 " " . . .	15.50	77.50
Freight & Haul.	" 12 " " . . .	do.	186.00
Earthwork			30.00
Incidental Expenses, etc., 5%			35.60

Estimated Cost	747.60
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1607-61. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.	159.31
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1607-61. Bridge. 20 x 8. Side Canal.

Same as at Sta. 1024-49.	46.72
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1615-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.	159.31
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1628-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.	159.31
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1659-29. Outlet Gate. 10 x 22 x 6.

Same as at Sta. 1392-76.	418.12
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1659-29. Bulkhead. 60. Side Canal.

Same as at Sta. 1106-07.	86.56
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Total forward	\$13,375.13
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Merced Co.

1529

7. Outside Canal.

Brought Forward	\$13,375.13
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1659-20. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.	159.31
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1660-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50.	159.31
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1660-53. Stop Gate. 60 x 18 x 6.

Same as at Sta. 1107-65..... 975.87

1701-64. Outlet Gate. 10 x 18 x 5.

Same as at Sta. 1106-07..... 384.91

1729-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50..... 159.31

1729-56. Bridge. 100 x 24.

Same as at Sta. 1607-61..... 747.60

1729-56. Bridge. 20 x 8. Side Canal.

Same as at Sta. 1024-49..... 46.72

1744-72. Outlet Gate. 10 x 22 x 6.

Lumber R W	at \$27 M ft....	5.63	152.01
" O P	" 27 " " ...	.72	19.44
" Weirboards @	50 " " ...	.18	9.00
" Battens	at 30 " " ...	.50	15.00
Carpenter Work	" 10 " " ...	7.03	70.30
Freight & Haul.	" 10 " " ...	do.	70.30
Earthwork, excavation & back fill.....			30.00
Incidental Expenses, etc., 10%.....			36.60

 402.65

1780-00. Stop Gate. 10 x 10 x 4. Side Canal.

Same as at Sta. 1105-50..... 159.31

1794-20. Outlet Gate. 12 x 22 x 6.

Same as at Sta. 1744-72..... 402.65

 Total forward \$16,972.77

Merced Co.

1530 8. Outside Canal.

Brought Forward \$16,972.77

1795-30. Stop Gate. 60 x 18 x 6.

Lumber R W	at \$27	M ft.	14.76	\$389.52
" O P	" 27	" "	2.32	62.64
" Weirboards	@ 50	" "	.96	48.00
" Battens	at 30	" "	1.00	30.00
Carpenter Work	" 10	" "	19.04	190.40
Freight & Haul.	" 10	" "	do.	190.40
Earthwork, excavation & back fill				70.00
Incidental Expenses, etc., 10%				98.09

Estimated Cost 1,079.05

1799-28. Waste Gate (Upper), Los Banos Creek.

Lumber R W	at \$27	M ft.	40.20	\$1,085.40
" O P	" 27	" "	1.60	43.20
" Weirboards	@ 50	" "	4.50	225.00
" Battens	at 30	" "	1.20	36.00
" Piles O P	@ 27	" "	27.60	745.20
Carpenter Work	at 10	" "	75.10	751.00
Freight & Haul.	" 10	" "	do.	751.00
Pile drive, Sheet 507 @ 1.00				507.00
Earthwork, excavation & back fill				105.00
Incidental expenses, etc., 10%				424.88

Estimated Cost 4,673.68

1799-28. Waste Gate (Lower), Los Banos Creek.

Lumber R W	at \$27	M ft.	47.60	\$1,285.20
" O P	" 27	" "	6.50	175.50
" Weirboards	@ 50	" "	4.50	225.00

Totals forward " " ... 58.60 \$1,685.70 \$22,725.50

Merced Co.

1531 9. Outside Canal.

Brought Forward		M ft.	58.60	\$1,685.70	\$22,725.50
Lumber Battens	at \$30	" "	1.70	51.00	
" Piles	" 27	" "	31.50	850.50	
Carpenter Work	" 10	" "	91.80	918.00	
Freight & Haul.	" 10	" "	do.	918.00	
Pile Driv. Sheet 580 @ 1	" "	" "	do.	580.00	
Earthwork, excavation & back fill				125.00	
Incidental Expenses, etc., 10%				512.82	

Estimated Cost 5,641.92

25 Small Outlet Gates on Side Canal, estimated @ \$35. 875.00

Measuring Gates on Outlet Gates.

12 ft. opening	1 @	\$63.00	63.00
10 " "	10 "	57.00	570.00
6 " "	1 "	40.00	40.00

Total 673.00

Total Estimated Cost \$29,914.52

Outside Canal.

Length of Canal in Merced County 80,000 ft. = 15.15 miles.
Right of Way 200 feet in width.

Section of Canal.

Base 50 ft. inside slopes 3:1 cuts 2.5 to 4.0 ft.

Side Canal.

78,500 ft. in Merced County Base 10 ft. Average Cut 1.6 ft.

Merced Co.

1532

Merced County.

Estimated Cost of Outside Canal Extension.

Stop and Outlet Gates, Bridges, etc.	\$22,360.48
Earth Excavation, 456,655 yds. at 10 @	45,665.50
Engineering and General Superintendence, etc., 10% . .	6,802.59

Total 74,828.57

Right of Way 360.4 acres @ —.

List of Stop and Outlet Gates, Bridges, etc., on following pages.

1533

Outside Canal Extension.

1800-31. Stop Gate. 50 x 16 x 8. Head of Extension.

Lumber R W	at \$27	M ft.	13.10	\$353.70
" O P	" 27	" " . . . . .	.70	18.90
" Weirboards @	50	" "	1.00	50.00
" Battens	" 30	" "	1.00	30.00
" O P @	27	" "	3.20	86.40
Carpenter Work	" 10	" "	19.00	190.00
Freight & Haul.	" 10	" "	do.	190.00
File Driv. Sheet 80 @ 1				80.00
Earthwork, excavation & back fill.				67.00
Incidental Expenses, etc., 10%				106.60

Estimated Cost 1,172.60

1803-06. Bridge. 70 x 20.

Lumber R W	at \$27 M ft....	1.88	50.76
" O P	" 27 " "....	6.42	173.34
Carpenter Work	" 5 " "....	8.30	41.50
Freight & Haul.	" 10 " "....	do.	83.00
Earthwork	.....		25.00
Incidental Expenses, etc., 5%	.....		18.68

Estimated Cost 392.28

1823-05. Outlet Gate. 10 x 18 x 5.

Lumber R W	at \$27 M ft....	5.13	138.51
" O P	" 27 " "....	.72	19.44
" Weirboards @	50 " "....	.18	9.00
" Battens	at 30 " "....	.40	12.00
Carpenter Work	" 10 " "....	6.43	64.30
Freight & Haul.	" 10 " "....	do.	64.30

Totals forward \$307.55 \$1,564.88

1534

2. Outside Canal Extension.

Brought Forward	.....	\$307.55	\$1,564.88
Earthwork, excavation & back fill.....		30.00	
Incidental Expenses, etc., 10%.....		33.75	

Estimated Cost 371.30

1852-09. Bridge. 100 x 24.

Lumber R W	at \$27 M ft....	3.90	105.30
" O P	" 27 " "....	11.60	313.20
Carpenter Work	" 5 " "....	15.50	77.50
Freight & Haul.	" 10 " "....	do.	155.00
Earthwork	.....		30.00
Incidental Expenses, etc. 5%	.....		34.05

Estimated Cost 715.05

1852-65. Outlet Gate. 10 x 18 x 7.

Same as at Sta. 1823-05..... 371.30

1899-92. Bridge. 80 x 24.

Lumber R W	" 27 M ft....	3.05	82.35
" O P	" 27 " "....	9.40	253.80
Carpenter Work	" 5 " "....	12.45	62.25
Freight & Haul.	" 10 " "....	do.	124.50
Earthwork	.....		25.00
Incidental Expenses, etc., 5%	.....		27.39

Estimated Cost 575.29

1915-73. Outlet Gate. 10 x 18 x 7.

Same as at Sta. 1823-05..... 371.30

1916-23. Bridge. 100 x 24.

Same as at Sta. 1852-09..... 715.05

Total forward \$4,684.17

1535 3. Outside Canal Extension.

Brought Forward \$4,684.17

1955-22. Outlet Gate. 10 x 18 x 7.

Same as at Sta. 1823-05..... 371.30

1977-61. Bridge. 100 x 24.

Same as at Sta. 1852-09..... 715.05

2059-84. Head Gate. 20 x 24 x 12. Outlet Canal No. 4.

Lumber R W	at \$27	M ft. ...	15.90	429.30
" O P	" 27	" " ...	1.66	44.82
" Weirboards @	50	" " ...	.44	22.00
" Battens	" 30	" " ...	1.00	30.00
Carpenter Work	" 10	" " ...	19.00	190.00
Freight & Haul.	" 10	" " ...	do.	190.00
Earthwork, excavation & back fill.....				71.00
Incidental Expenses, etc., 10%.....				97.71

Estimated Cost 1,074.83

2065-52. Bridge. 70 x 20.

Same as at Sta. 1803-06..... 392.28

2066-63. Outlet Gate. 10 x 18 x 8.

Same as at Sta. 1823-05..... 371.30

2969-71. Stop Gate. 40 x 14 x 7.

Lumber R W	at \$27	M ft. ...	10.26	277.02
" O P	" 27	" " ...	.34	9.18
" Weirboards @	50	" " ...	.80	40.00
" Battens	at 30	" " ...	.80	24.00
Carpenter Work	" 10	" " ...	12.20	122.00
Freight & Haul.	" 10	" " ...	do.	122.00
Earthwork, excavation & back fill.....				67.00

Total forward \$661.20 \$7,608.93

1536

4. Outside Canal Extension.

Brought Forward	\$661.20	\$7,608.92
Incidental Expenses, etc., 10%	66.12	
		<u>727.32</u>

2137-18. Outside Gate. 10 x 18 x 6.

Same as at Sta. 1823-05	371.30
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2155-84. Bridge. 60 x 16.

Lumber R W	at \$27 M ft. ...	1.58	42.66
" O P	" 27 " " ...	4.82	130.14
Carpenter Work	" 5 " " ...	6.40	32.00
Freight & Haul.	" 10 " " ...	do.	64.00
Earthwork			25.00
Incidental Expenses, etc., 5%			<u>14.69</u>

Estimated Cost	308.49
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2176-30. Outlet Gate. 10 x 18 x 6.

Same as at Sta. 1823-05	371.30
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2211-50. Outlet Gate. 5 x 16 x 6.

Estimated	250.00
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2236-76. Bridge. 80 x 24.

Same as at Sta. 1899-92	575.29
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2242-61. Outlet Gate. 10 x 18 x 6.

Same as at Sta. 1823-05	371.30
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2259-89. Stop Gate. 40 x 14 x 7.

Same as at Sta. 2069-71	727.32
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2262-79. Waste Gate. 60 x 20 x 10. San Luis.

Lumber R W	at \$27 M ft. ...	15.90	429.30
" O P	" 27 " " ...	1.66	44.82
" Weirboards @	50 " "44	22.00

Totals forward	" " ...	18.04	\$496.12	\$11,311.27
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1537

5. Outside Canal Extension.

Brought Forward	M Ft...	18.04	\$496.12	\$11,311.25
Lumber Battens	at \$30 " " ...	1.00	30.00	
Carpenter Work	" 10 " " ...	19.04	190.40	
Freight & Haul.	" 10 " " ...	do.	190.40	
Earthwork, excavation & back fill.....			71.00	
Incidental Expenses, etc., 10%.....			97.79	
Estimated Cost				1,075.71
2270-20. Outlet Gate.	10 x 18 x 6.			
Same as at Sta. 1823-03.....				371.30
2271-07. Stop Gate.	40 x 14 x 7.			
Same as at Sta. 2069-71.....				727.32
2338-57. Outlet Gate.	10 x 18 x 6.			
Same as at Sta. 1823-05.....				371.30
2351-91. Bridge.	100 x 24.			
Same as at Sta. 1852-09.....				715.05
2362-44. Outlet Gate.	10 x 18 x 6.			
Same as at Sta. 1823-05.....				371.30
2386-25. Outlet Gate.	10 x 18 x 6.			
Same as at Sta. 1823-05.....				371.30
2386-98. Stop Gate.	40 x 14 x 7.			
Same as at Sta. 2069-71.....				727.32
2408-13. Outlet Gate.	10 x 18 x 6.			
Same as at Sta. 1823-05.....				371.30
2451-47. Outlet Gate.	10 x 18 x 6.			
Same as at Sta. 1823-05.....				371.30
2461-50. Bridge.	80 x 24.			
Same as at Sta. 1899-92.....				575.29
Total forward				\$17,359.74

1538 6. Outside Canal Extension.

Brought Forward \$17,359.74

2491-28. Outlet Gate. 10 x 18 x 6.

Same as at Sta. 1823-05..... 371.30

2522-26. Outlet Gate. 10 x 18 x 6.

Same as at Sta. 1823-05..... 371.30

2522-95. Bridge. 80 x 24.

Same as at Sta. 1899-92 575.29

2523-86. Head Gate. 20 x 18 x 8. Outlet Canal No. 5.

Lumber R W	at \$27	M ft....	11.73	\$316.71
" O P	" 27	" " ...	1.53	41.31
" Weirboards	@ 50	" " ...	.44	22.00
" Battens	at 30	" " ...	.70	21.00
Carpenter Work	" 10	" " ...	14.40	144.00
Freight & Haul.	" 10	" " ...	do.	144.00
Earthwork, excavation & back fill				63.00
Incidental Ezpenses, etc., 10%				75.20

Estimated Cost 827.22

2536-04. Outlet Gate. 10 x 18 x 6.

Same as at Sta. 1823-05..... 371.30

2537-45. Stop Gate. 40 x 14 x 7.

Same as at Sta. 2069-71 727.32

2581-31. Stop Gate. 20 x 14 x 7.

Lumber R W	at \$27	M ft....	7.80	210.60
" Weirboards	@ 50	" " ...	.35	17.50
" Battens	" 30	" " ...	.55	16.50
Carpenter Work	" 10	" " ...	8.70	87.00
Freight & Haul.	" 10	" " ...	do.	87.00

Totals forward \$418.60 \$20,603.47

1539 7. Outside Canal Extension.

Brought Forward \$418.60 \$20,603.47

Earthwork, excavation & back fill..... 60.50

Incidental Ezpenses, etc., 10%..... 47.91

Estimated Cost 527.01

2585. End of Canal.

Measuring Gates on Outlet Gates.

10 ft. Opening	21 @	\$57.00	1,197.00
5 " "	1 " "	33.00	33.00
Total.....			1,230.00
Total Estimated Cost.....			\$22,360.48

Outside Canal Extension.

Length of Canal in Merced County 78,500 Feet = 14.86 Miles.
Right of Way 200 Ft. in Width.

Sections of Canal.

26,000 ft. Base 40 ft. inside slopes 3:1 various cuts.
52,500 " " 30 " " " 3:1 " "

1540 Estimated Cost of Outlet Canal No. 4.

Drops	\$2,587.20
Earth Excavation 6,118 yds. @ 8¢	489.44
Engineering, General Superintendence, etc., 10%.....	307.66
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	\$3,384.30

Right of Way.

List of Head and Stop Gates on following pages.

1541 Outlet Canal No. 4.

Drop 20 x 20 x 9.

Lumber R W	at \$27 M ft. . . .	10.00	\$270.00
" Weirboards	" 50 " " . . .	.55	27.50
" Battens	" 30 " " . . .	.45	13.50
Carpenter Work	" 10 " " . . .	11.00	110.00
Earthwork, excavation & back fill.....			57.00
Incidental Expenses, etc., 10%.....			58.50

Estimated Cost	646 80
3 Drops, same as above @ \$646.80.....	1,940.40
<hr/>	
Total Estimated Cost	\$2,587.20

Outlet Canal No. 4.

Length of Canal 1,900 feet. 0.35 miles.

Section.

Base 20 ft. inside slopes 3:1 average cut 3 feet.

1542 Estimated Cost of Outlet Canal No. 5.

Drops	\$5,256.02
Earth Excavation 23,200 yds. @ 8¢	1,856.00
Engineering and General Superintendence, etc., 10% ..	711.20

Total	\$7,823.22
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Right of Way.

List of Head and Stop Gates on following page.

1543 Outlet Canal No. 5.

Drop 20 x 18 x 8.

Lumber R W	at \$27 M ft.	12.00	\$324.00
" Weirboards	" 50 " " . . . .	.44	22.00
" Battens	" 30 " " . . . .	.76	22.80
Carpenter Work	" 10 " "	13.20	132.00
Freight & Haul.	" 9 " "	do.	118.80
Earthwork, excavation & back fill			63.00
Incidental Expenses, etc., 10%			68.26

Estimated Cost	750.86
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6 Drops, same as above, at \$750.86	4,505.16
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Total Estimated Cost	\$5,256.02
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Outlet Canal No. 5.

Length of Canal 7,200 ft. 1.36 miles.

Section of Canal.

Base 20 ft. inside slopes 3:1 Average cut 3.0 ft.

1544 *Estimated Cost of the Works of the San Joaquin and Kings River Canal and Irrigation Company in Stanislaus County.*

Main Canal Extension A	Page 1	\$40,363.92
" " " B	" 10	29,097.50
Christimba Branch Canal	" 15	3,321.00
Canal Station, Improvements.		1,500.00
" " Horse, Cart and Wagon		175.00

Total	\$74,457.42
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San Francisco, Cal., December 24th, 1906.

R. H. GOODWIN,
Consulting Engineer.

1545

Stanislaus County.

Estimated Cost of Main Canal Extension A.

Stop and Outlet Gate, Bridges, etc.....	\$12,902.98
Earth Excavation, 232.504 yds. @ 10¢.....	23,250.40
Telephone Line 7.73 miles @ \$70.....	541.10
Engineering, General Superintendence, etc., 10%.....	3,669.44
Total	\$40,363.92

Right of Way 187.3 acres @ —.

List of Stop and Outlet Gates, Bridges, etc., on following pages:

1546

Main Canal Extension "A."

Station 3132-67. County Line Merced and Stanislaus.

3135-62. Bridge. 60 x 16.

Lumber R W	at \$27 M ft....	1.56	\$42.12
" O P	" 27 " " ...	5.20	140.40
Carpenter Work	@ 5 " " ...	6.76	33.80
Freight & Haul.	" 8 " " ...	do.	54.08
Earthwork			25.00
Incidental Expenses, etc., 5%.....			14.77

Estimated Cost 310.17

3135-78. Outlet Gate. 3.5 x 16 x 4.

Lumber R W	at \$27 M ft....	1.65	\$44.55
Carpenter Work	" 10 " " ...	do.	16.50
Freight & Haul.	" 8 " " ...	do.	13.20
Earthwork, excavation & back fill.....			25.00
Incidental Expenses, etc., 10%.....			9.92

Estimated Cost 109.17

5144-28. Outlet Gate. 3 x 12 x 4.

Same as at Sta. 3135-78..... 109.17

3155-09. Outlet Gate. 5 ft. Opening.

Lumber R W	at \$27 M ft....	3.72	\$100.44
" O P	" 27 " " ...	0.26	7.02
Carpenter Work	" 10 " " ...	3.98	39.80
Freight & Haul.	" 8 " " ...	do.	31.84
Earthwork, excavation & back fill			25.00
Incidental Expenses, etc., 10%.....			20.41

Estimated Cost 224.51

3155-62. Bridge. 65 x 24.

Lumber R W	at \$27	M ft....	2.54	68.58	
Totals forward		M ft....	2.54	\$68.58	\$753.02

Stanislaus Co.

1547 Main Canal Extension "A."

Brought Forward		M ft....	2.54	\$68.58	\$753.02
Lumber O P	at \$27	" " ...	6.68	185.22	
Carpenter Work	" 5	" " ...	9.40	47.00	
Freight & Haul	" 8	" " ...	do.	75.20	
Earthwork				25.00	
Incidental Expenses, etc., 5%				20.05	
Estimate Cost					421.05

3158-40. Outlet Gates. 3 x 16 x 4.

Lumber R W	at \$27	M ft....	1.43	38.61	
Carpenter Work	" 10	" " ...	do.	14.30	
Freight & Haul.	" 8	" " ...	do.	11.44	
Earthwork, excavation & back fill				25.00	
Incidental Expenses, etc., 10%				8.93	
Estimate Cost					98.28

3170-30. Outlet Gate. 3 x 16 x 4.

Same as at Sta. 3158-40.					98.28
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3178-60. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09.					224.51
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3179-17. Stop Gate. 42 x 26 x 9.

Lumber R W	at \$27	M ft....	10.74	289.98	
" O P	" 27	" " ...	3.90	105.30	
" Weirboards @	50	" " ...	1.00	50.00	
" Battens	at 30	" " ...	1.36	40.80	
Carpenter Work	" 10	" " ...	17.00	170.00	
Freight & Haul.	" 8	" " ...	do.	136.00	
Earthwork, excavation & back fill				60.00	
Incidental Expenses, etc., 10%				85.20	

Estimated Cost					937.28
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Total forward					\$2,532.42
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Stanislaus Co.

1548

Main Canal Extension "A."

Brought Forward	\$2,532.42
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3191-61. Outlet Gate. 5 ft. Opening.	
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Same as at Sta. 3155-09	224.51
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3191-98. Inlet Gate. 5 ft. Opening.	
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Same as at Sta. 3155-09	224.51
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3202-31. Outlet Gate. 3.5 x 16 x 5.	
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Same as at Sta. 3135-78.....	109.17
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3218-06. Outlet Box. 2 x 2 x 16.	
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Estimated	50.00
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3223-67. Outlet Gate. 2.5 x 16 x 3.	
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Same as at Sta. 3158-40	98.28
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3237-08. Outlet Gate. 5 ft. Opening.	
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Same as at Sta. 3155-09.....	224.51
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3251-89. Bridge. 66 x 16.	
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Lumber R W	at \$27	M ft. ...	1.60	\$43.20
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" O P	" 27	" " ...	6.60	178.20
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Carpenter Work	" 5	" " ...	8.20	41.00
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Freight & Haul.	" 8	" " ...	do.	41.00
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Earthwork				25.00
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Incidental Expenses, etc., 5%.....				16.42
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Estimated Cost	344.82
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3252-43. Outlet Gate. 3 x 16 x 5.	
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Same as at Sta. 3158-40	98.28
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3253-69. Bridge. 66 x 16.	
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Lumber R W	at \$27	M ft. ...	2.23	60.21
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" O P	" 27	" " ...	5.90	159.30
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Carpenter Work	" 5	" " ...	8.13	40.65
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Freight & Haul.	" 8	" " ...	do.	65.04
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Totals forward	\$325.20	\$3,906.50
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Stanislaus Co.

1549 Main Canal Extension "A."

Brought Forward	\$325.20	\$3,906.50
Earthwork	25.00	
Incidental Expenses, etc., 5%	17.51	

Estimated Cost	367.71
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3277-69. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09	224.51
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3283-77. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09	224.51
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3292-63. Bridge. 62 x 16.

Lumber R W	at \$27	M ft.	1.59	42.93
" O P	" 27	" "	5.41	146.07
Carpenter Work	" 5	" "	7.00	35.00
Freight & Haul.	" 8	" "	do.	56.00
Earthwork				25.00
Incidental Expenses, etc., 5%				15.25

Estimated Cost	320.25
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3301-97. Outlet Culvert. 3 x 3 x 20.

Estimated	90.00
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3302-64. Stop Gate. 37 x 24 x 8.5.

Lumber R W	at \$27	M ft.	8.90	240.30
" O P	" 27	" "	4.15	112.05
" Weirboards @	50	" "	1.15	57.50
" Battens	at 30	" "	0.80	24.00
Carpenter Work	" 10	" "	15.00	150.00
Freight & Haul.	" 8	" "	do.	120.00
Earthwork				60.00
Incidental Expenses, etc., 10%				76.38

Estimated Cost	840.23
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Total forward	\$5,973.71
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Stanislaus Co.

1550 Main Canal Extension "A."

Brought Forward	\$5,973.71
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3316-67. Outlet Culvert. 2.5 x 3 x 16.

Estimated 75.00

3330-80. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09 224.51

3356-20. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09 224.51

3361-57. Outlet Culvert. 3 x 3 x 16.

Estimated 75.00

3366-38. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09 224.51

3378-22. Bridge. 60 x 20.

Lumber R W at \$27 M ft. ... 1.78 \$48.06

" O P " 27 " " ... 6.57 177.39

Carpenter Work " 5 " " ... 8.35 41.75

Freight & Haul. " 8 " " ... do. 66.80

Earthwork 25.00

Incidental Expenses, etc., 5% 17.95

Estimated Cost 376.95

3393-00. Outlet Culvert. 3 x 4 x 16.

Estimated 75.00

3409-20. Inlet Gate. 3.5 x 4 x 16.

Estimated 75.00

3409-25. Outlet Gate. % ft. Opening.

Same as at Sta. 3155-09 224.51

3409-72. Stop Gate. 34 x 22 x 9.

Lumber R W at \$27 M ft. ... 8.45 228.15

" O P " 27 " " ... 4.65 125.55

Totals forward " " ... 13.10 \$353.70 \$7,548 70

Stanislaus Co.

1551

Main Canal Extension "A."

Brought Forward	M ft. . . .	13.10	\$353.70	\$7,548.70
Lumber Weirboards	at \$50 " " . . .	1.00	50.00	
" Batts	" 30 " " . . .	0.70	21.00	
Carpenter Work	" 10 " " . . .	14.80	148.00	
Freight & Haul.	" 8 " " . . .	do.	118.40	
Earthwork, excavation & back fill.			60.00	
Incidental Expenses, etc. 10%			75.11	

Estimated Cost 826.21

3432-02. Bridge. 62 x 16.

Lumber R W	at \$27 M ft. . . .	1.58	42.66	
" O P	" 27 " " . . .	6.02	162.54	
Carpenter Work	" 5 " " . . .	7.60	38.00	
Freight & Haul.	" 8 " " . . .	do.	60.80	
Earthwork			25.00	
Incidental Expenses, etc., 5%			16.45	

Estimated Cost 345.45

3432-40. Outlet Gate. 3 x 16 x 6.

Same as at Sta. 3135-78. 109.17

3438-90. Outlet Gate. 3.5 x 16 x 3.

Same as at Sta. 3158-40. 98.28

3452-30. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09. 224.51

3465-46. Outlet Gate. 3.5 x 16 x 4.

Same as at Sta. 3158-40. 98.28

3473-61. Outlet Gate. 3 x 18 x 5.

Same as at Sta. 3158-40. 98.28

3480-00. Outlet Gate. 2.5 x 16 x 3.

Same as at Sta. 3158-40. 98.28

Total forward \$9,447 16

Stanislaus Co.

1552

Main Canal Extension "A."

Brought Forward \$9,447.16

3489-06. Outlet Gate. 2.5 x 18 x 4.

Same as at Sta. 3158-40..... 98.28

3489-33. Bridge. 60 x 16.

Lumber R W at \$27 M ft. ... 1.50 \$40.50

" O P " 27 " " ... 4.80 129.60

Carpenter Work " 5 " " ... 6.30 31.50

Freight & Haul. " 8 " " ... do. 50.40

Earthwork 25.00

Incidental Expenses, etc., 5%..... 13.85

Estimated Cost 290.85

3501-70. Outlet Gate. 2.5 x 16 x 3.

Same as at Sta. 3158-40..... 98.28

3509-35. Inlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09..... 224.51

3509-75. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09..... 224.51

3520-05. Outlet Gate. 2.5 x 16 x 5.

Same as at Sta. 3158-40..... 98.28

3533-39. Inlet Gate. 4 x 5 x 16.

Estimated 85.00

3839-85. Inlet Gate. 5 ft. Opening.

Same as at Sta. 3155-09..... 224.51

3540-50. Waste Gate. 16 x 24 x 12.

Lumber R W at \$27 M ft. ... 10.90 294.30

" O P " 27 " " ... 2.45 66.15

" Weirboards @ 50 " " ... 1.15 57.50

" Battens at 30 " " ... 0.70 21.00

Totals forward " " ... 15.20 \$438.95 \$10,791.38

Stanislaus Co.

1553 Main Canal Extension "A."

Brought Forward	M ft. . .	15.20	\$438.95	\$10,791.38
Lumber Piles	at \$27 M ft. . .	6.40	172.80	
Carpenter Work	" 10 " " . . .	21.60	216.00	
Freight & Haul.	" 8 " " . . .	do.	172.80	
Driv. Piles sheet 100 @	1.00		100.00	
Earthwork, excavation & back fill.			60.00	
Incidental Expenses, etc., 10%			116.05	

Estimated Cost 1,276.60

Measuring Gates on Old Outlet Gates.

7-2½ ft. opening @	\$20.00	140.00	
13-3 " " " "	23.00	299.00	
12-5 " " " "	33.00	396.00	
			835.00

Total Estimated Cost. 12,902.98

Length of Canal in Stanislaus County 40,800 Ft. 7.73 Miles.
Right of Way 200 Ft. in Width.

Sections of Canal.

12,400 ft. Base 30 ft. inside slopes 2½:1 cut 4.5
28,400 " " 25 " " " " " 4.0

Stanislaus Co.

1554 Stanislaus County.

Estimated Cost of Main Canal Extension B.

Stop and outlet gate, bridges, etc.	\$12,354.04
Earth excavation 138,354 yds. at 10¢	13,835.40
Telephone Line 4.13 miles at \$70	289.10
Engineering, general superintendence, etc., 10%	2,618.96
Total	\$29,097.50

Right of way 100 acres @ —.

List of stop and outlet gates, bridges, etc., on following pages.

1555

Main Canal Extension "B."

Station 3537-35. Beginning of Extension.

3556-40. Stop Gate. 33 x 24 x 12 ft.

Lumber R W	at \$27	M ft. . . .	14.66	\$395.82
" O P	" 27	" " . . .	8.12	219.24
" Weirboards	@ 50	" " . . .	2.60	130.00
" Battens	at 30	" " . . .	0.72	21.60
" Piles Sheet	@ 27	" " . . .	8.46	228.42
Carpenter Work	@ 10	" " . . .	34.56	345.60
Freight & Haul.	" 8	" " . . .	do.	276.48
Driv. piles sheet 132	at \$1.00			132.00
Earthwork, excavation & back fill				100.00
Incidental Expenses, etc., 10%				184.91

Estimated Cost	2,034.07
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3557-25. Waste Gate. 50 x 24 x 10.

Estimated Cost	3,000.00
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3558-13. Stop Gate. 32 x 18 x 12.

Same as at Sta. 3556-40	2,034.07
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3590-35. Bridge. 60 x 16.

Lumber R W	at \$27	M ft. . . .	1.40	37.80
" O P	" 27	" " . . .	4.43	119.61
Carpenter Work	" 5	" " . . .	5.83	29.15
Freight & Haul.	" 8	" " . . .	do.	46.64
Earthwork				25.00
Incidental Expenses, etc., 5%				12.91

Estimated Cost	271.11
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3592-36. Outlet Gate. 5 ft. Opening.

Lumber R W	at \$27	M ft. . . .	3.72	100.44
" O P	" 27	" " . . .	0.26	7.02
Carpenter Work	" 10	" " . . .	3.98	39.80
Freight & Haul.	" 8	" " . . .	do.	31.84

Totals forward	\$179.10	\$7,339.25
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Stanislaus Co.

1068 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1556 Main Canal Extension "B."

Brought Forward	\$179.10	\$7,339.25
Earthwork, excavation & back fill.....	25.00	
Incidental Expenses, etc., 10%.....	20.41	

Estimated Cost	224.51
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3600-00. Outlet Culvert. 3 x 3 x 14.

Estimated	75.00
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3602-99. Outlet Gate. 5 x 18 x 4.

Lumber R W	at \$27 M ft....	1.90	51.30
" O P	" 27 " " ...	0.30	8.10
Carpenter Work	" 10 " " ...	2.20	22.00
Freight & Haul.	" 8 " " ...	do.	17.60
Earthwork, excavation & back fill.....			25.00
Incidental Expenses, etc., 10%.....			12.40

Estimated Cost	136.40
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3603-18. Outlet Gate. 5 x 16 x 5.

Same as at Sta. 3602-99.....	136.40
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3605-57. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36.....	224.51
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3613-85. Outlet Gate. 3 x 14 x 3½.

Lumber R W	at \$27 M ft....	1.40	37.80
" O P	" 27 " " ...	0.20	5.40
Carpenter Work	" 10 " " ...	1.60	16.00
Freight & Haul.	" 8 " " ...	do.	12.80
Earthwork, excavation & back fill.....			20.00
Incidental Expenses, etc., 10%.....			9.20

Estimated Cost	101.20
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3624-73. Outlet Gate. 3 x 16 x 5.

Same as at Sta. 3613-85.....	101.20
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Total forward	\$8,338.47
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Stanislaus County.

1557

Main Canal Extension "B."

Brought Forward \$8,338.47

3633-01. Bridge. 60 x 18.

Lumber R W	at \$27 M ft....	2.16	\$58.32
" O P	" 27 " " ...	4.68	126.36
Carpenter Work	" 5 " " ...	6.84	34.20
Freight & Haul.	" 8 " " ...	do.	54.72
Earthwork			25.00
Incidental Expenses, etc., 5%			14.93

Estimated Cost 313.53

3645-34. Outlet Gate. 3 x 16 x 5.

Same as at Sta. 3613-85..... 101.20

3649-66. Outlet Gate. 3 x 18 x 5.

Same as at Sta. 3613-85..... 101.20

8653-50. Bridge. Cross Station.

Estimated 500.00

3661-88. Outlet Gate. 3 x 16 x 6.

Same as at Sta. 3613-85..... 101.20

3666-38. Outlet Culvert. 2½ x 14 x 3.

Estimated 65.00

3677-68. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36..... 224.51

3689-76. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36..... 224.51

3696-18. Outlet Gate. 3 x 16 x 5.

Same as at Sta. 3613-85..... 101.20

3696-62. Stop Gate. 33 x 24 x 8.

Lumber R W	at \$27 M ft....	1.00	27.00
" O P	" 27 " " ...	6.30	170.10

Totals forward M ft.... 7.30 \$197.10 \$10,070.82

Stanislaus County.

1558 Main Canal Extension "B."

Brought Forward	M ft....	7.30	\$197.10	\$10,070.82
Lumber Weirboards @ \$50	" " ...	0.86	43.00	
" Battens at 30	" " ...	0.64	19.20	
Carpenter Work	" 10 " " ...	8.80	88.00	
Freight & Haul,	" 8 " " ...	do.	70.40	
Earthwork, excavation & back fill.....			60.00	
Incidental Expenses, etc., 10%.....			47.77	

Estimated Cost	525.47
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3710-27. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36.....	224.51
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3727-65. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36.....	224.51
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3743-86. Outlet Gate. 3.5 x 14 x 3.

Same as at Sta. 3613-85.....	101.20
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3755-09. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36.....	224.51
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3755-19. Outlet Gate. 5 ft. Opening.

Same as at Sta. 3592-36.....	224.51
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3755-39. Waste Gate. 5 ft. Opening.

Same as at Sta. 3592-36.....	224.51
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Measuring Gates on Outlet Gates.

1-2½ ft. opening	at \$20.00.....	20.00
8-3 " "	" 23.00.....	184.00
10-5 " "	" 33.00.....	330.00

Total	534.00
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Total Estimated Cost.....	\$12,354.04
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Length of Canal 21,800—4.13 miles.

Right of way 200 ft. in width.

Section of Canal.

Base 25 ft. inside slopes 2½:1 various cuts.

Stanislaus Co.

1559

Oristimba Branch Canal.

6 Stop Gates 12 x 12 x 5 at \$150.00.....	\$900.00
7 Outlet " 3 x 6 x 4 " 35.00.....	245.00

Flume Over Oristimba Creek.

Lumber at \$27 M 't....	21.50	\$580.50
Carpenter Work @ 10 " " ...	do.	215.00
Freight & Haul. @ 8 " " ...	do.	172.00
Earthwork		100.00
Incidental Expenses, etc., 10%.....		106.70

Estimated Cost	1,174.20
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Earth Excavation 11,000 yrs. @ 7¢.....	770.00
Engineering, General Superintendence, etc., 10%.....	231.80

Total Estimated Cost.....	\$3,321.00
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Length of Canal 4000 ft.

Section of Canal.

Base 8 ft. Inside slopes 1½:1 Average Cut 3 ft.

Stanislaus Co.

Endorsed: Affidavit of Robert H. Goodwin on Motion for Injunction Pendente Lite. Filed January 10, 1908. Southard Hoffman, clerk, by J. A. Schaertzer, Deputy clerk.

1560

COMPLAINANT'S EXHIBIT No. 3.

June Term, Board of Supervisors, 1904.

MONDAY, June 20th, 1904.

The Board meets pursuant to adjournment.

Present: Full board and clerk.

In the Matter of Fixing the Rate for Irrigating Lands under the San Joaquin and Kings River Canal in Merced County, California.

On this 20th day of June, 1904, there came on before the Board to be heard, the petition of W. J. Stockton et als., filed with the clerk on the 18th day of May, 1904, praying this Board to regulate and establish the maximum rates which the San Joaquin and Kings River Canal and Irrigation Company, a corporation, shall charge for water for irrigating purposes.

Thereupon due proof was made that said petition had been published in accordance with law, together with a notice of this hearing.

And thereupon the Board, having heard the evidence of all parties, relating to said subject, estimates the value of the canals, ditches, and all other property actually used and useful to the appropriations and furnishing of water belonging to the said San Joaquin and Kings River Canal and Irrigation Company to be the sum of \$832,681.20, and this Board does further estimate that the annual reasonable expenses of said corporation including the costs of repairs, management and operating of said works is the sum of \$34,943.65.

And thereupon on motion of Supervisor Ogden, seconded by Supervisor Deane, it was resolved that the maximum rate at which water may and shall be sold by said Corporation within the County of Merced, for the purpose and use of irrigating shall be one dollar and eight cents per acre per annum commencing and to take effect on the first of July, 1904, Supervisors Ogden, Deane,

Hamilton and Price voting Aye, and Supervisor Whitworth,
1561 no.

It is further ordered by this Board that a record of said proceedings be made in the records of this Board, and that the Clerk cause the same to be published in the manner and for the time in which said petition and notice were published.

County Clerk's Office.

STATE OF CALIFORNIA,

County of Merced:

I, P. J. Thornton, County Clerk of the said County of Merced, State of California, and ex-officio Clerk of the Board of Supervisors thereof, do hereby certify that I have compared the foregoing copy of order made by the Board of Supervisors, with the original record of the same remaining in this office, and that the same is a full, true and correct copy of said original record.

Witness my hand and the seal of said Board, this 13th day of October, 1908.

[SEAL.]

P. J. THORNTON, *Clerk.*

Endorsed: Compl't's Exhibit No. 3. E. H. H. Master. Filed May 14, 1910. Southard Hoffman, Clerk. By J. A. Schaertzer. Deputy Clerk.

1562

COMPLAINANT'S EXHIBIT No. 4.

Office of the Board of Supervisors of Fresno County, California.

FRESNO, CALIF., *June 29th, 1904.*

Present, Full Board.

In the Matter of the Petition of C. H. BANTA et al., Asking the Board to Fix Water Rates of the San Joaquin and Kings River Canal and Irrigation Company.

The petition of C. H. Banta and fifty-nine others, all of whom are inhabitants and tax-payers of Fresno County, and consumers — water from the canals of the San Joaquin and Kings River Canal and Irrigation Company, a corporation, praying this board to regulate and establish the maximum rates which the aforesaid corporation shall charge for the purpose of irrigation, came on regularly to be heard on this 29th day of June, 1904, Mr. W. D. Crighton appearing for said petitioners, and Mr. W. B. Treadwell appearing for said corporation.

Thereupon it was duly proved that said petition and a notice of this hearing had been duly published according to law.

And thereupon this Board, having heard evidence on behalf of all parties, does hereby estimate the value of the canals and all other property actually used and useful and to the appropriation and furnish- of water, belonging to said San Joaquin and Kings River Canal and Irrigation Company, to be the sum of \$832,681.20, and does hereby estimate the annual reasonable expenses of said corporation, including the cost of repairs, management and operating said works, to be the sum of \$34,943.65; and this Board does hereby fix and establish the sum of 62 & 1/2 cents per acre per annum as the maximum rate which said corporation may charge and collect in said Fresno County for irrigation, commencing on the 1st day of July, 1904.

In Witness whereof, the Board of Supervisors of the County of Fresno, State of California, has caused a record hereof to be made in the minutes of said Board:

And the Clerk of said Board is hereby directed to publish the same in the manner and for the time in which said petition and notice were published.

(Volumbe "U" Page 177 Minutes of the Board of Supervisors.)

1563 STATE OF CALIFORNIA,

County of Fresno, ss:

I, W. O. Miles, County Clerk and ex-officio Clerk of the Board of Supervisors, in and for said Fresno County, do hereby certify the foregoing to be a full, true and correct copy of the original order of the Board of Supervisors now of record in my office, and of the whole of such original.

In Witness Whereof, I have hereunto set my hand and affixed

the seal of said Board of Supervisors, this 13th day of October, 1908.

[SEAL.]

W. O. MILES, *Clerk*,
By A. D. EWING,
Deputy Clerk.

Endorsed: Compl't's Exhibit No. 4. E. H. H., Master, etc.
Filed May 14, 1910. Southard Hoffman, Clerk. By J. A. Schaert-
zer, Deputy Clerk.

1564 COMPLAINANT'S EXHIBIT No. 6.

This agreement made and entered into this Eighteenth day of May, A. D. 1871, between The San Joaquin and King's River Canal Company, a corporation duly organized and doing business under and by virtue of the laws of the State of California, the party of the first part, and Henry Miller and Charles Lux, partners under the firm name and style of Miller & Lux, of the City and County of San Francisco and State of California, the parties of the second part:

Whereas: The party of the first part is organized for the purpose of constructing a canal on the West side of the San Joaquin river from King's River to tide water at some point at or near Suisun Bay,

Now therefore, this agreement witnesseth: That the said party of the first part, in consideration of the covenants hereinafter contained upon the part of the parties of the second part, does hereby promise, covenant and agree to and with the said parties of the second part that it will construct said canal and complete at least sixty (60) miles thereof from Fresno Slough in Fresno County by the first day of January, 1872, and a further distance to some point on the Western Pacific Railroad by the first day of April, 1872; provided, the progress of the work be not obstructed or interfered with by any owner or owners of land along the route of said canal; and in case of such obstruction or interference, this agreement shall not be void if the said Company use due diligence in acquiring a right of way by legal proceedings, and in prosecuting the work of constructing said canal; and further, that said party of the first part will, within a reasonable time, conducting the work with due diligence, lead into said canal the waters of King's

1565 river, thereby through said canal connecting the waters of the last mentioned River with those of the San Joaquin River, and that said canal from Cole or Murphy's Slough in the County of Fresno and State aforesaid, shall be forty (40) feet wide.

And the said parties of the second part, in consideration of the covenants herein contained on the part of the party of the first part, do hereby promise, covenant and agree to and with the party of the first part to give and grant unto it a right of way by the most practicable route over their lands in Fresno and Merced

counties, West of the San Joaquin River, for the purpose of making and maintaining said canal and its branches, and also for a tow-path on each side of said canal.

And the said parties of the second part, in the considerations aforesaid, do further promise, covenant and agree to and with the said party of the first part, that if the said party of the first part shall complete as aforesaid at least sixty (60) miles of said canal from the said Fresno Slough by the first day of January, 1872, that they will, after the expiration of time sufficient to raise two crops of grain on their said land, after the introduction of water by means of said canal for the purpose of irrigation, pay and give to said party of the first part, by way of subsidy, the sum of Twenty Thousand (\$20,000.00) Dollars in United States Gold Coin; provided, however, that sufficient water is furnished them, under the Rules and Regulations of said Company, to irrigate not less than fifty thousand (50,000) acres of their land; and it is expressly understood and agreed that should the said party of the first part be unable to furnish to said parties of the second part sufficient water from said canal to irrigate fifty thousand acres of their land

at such times and seasons as irrigation may be demanded
1566 by the said parties of the second part, then said subsidy shall be proportionally reduced—that is to say, the amount to be paid by way of subsidy shall bear the same proportion to twenty thousand dollars as any less number of acres than fifty thousand, belonging to said parties of the second part, which said canal is capable of irrigating, bears to fifty thousand acres; and further, the said parties of the second part promise and agree to and with the said party of the first part, that when the said canal shall be completed from King's River to tide-water, as aforesaid, so as to contain at all seasons of the year a sufficiency of water to irrigate at least fifty thousand acres of land of the said parties of the second part, and for nine (9) months in the year to run boats of sufficient size and capacity to carry seventy-five (75) tons of freight at a single load, they will give and pay unto the said party of the first part, by way of subsidy, the further sum of Ten thousand (\$10,000.00) Dollars in United States Gold Coin.

And the said parties of the second part further promise, covenant and agree to and with the said party of the first part, that when the said canal is so far completed as to furnish water for purposes of irrigation, they will pay to said party of the first part for each crop a sum not exceeding one dollar and twenty-five cents (\$1.25) per acre, or the prices paid by other parties, for every acre of their said lands actually irrigated by them from the waters of said canal.

And for the purpose of enabling the party of the first part to carry out its enterprise and effectuate its designs as aforesaid, it is further agreed that it shall have the use and benefit of all sloughs between said canal and the San Joaquin River on the said lands of the parties of the second part.

And it is further agreed that should the said canal diminish

the natural overflow which usually occurs between the first
1567 day of April and the fifteenth day of June, of the San
Joaquin River and its sloughs, upon the said lands of the said
parties of the second part, then the said party of the first part shall,
at any time between said months, open the gates of said canal at
the request of the said parties of the second part, and, free of charge
and expense to them, permit an overflow from the said canal on said
lands equal in quantity of water to that of which they were deprived
as aforesaid.

And it is further agreed that should the line of the said canal
not be extended through the northern portion of the said lands
owned by the said parties of the second part, that is to say, Town-
ship 8 South, Range 9 East, and Township 8 South, Range 10 East,
Mount Diablo Meridian, then they shall have the privilege of con-
ducting from said canal, by means of a branch canal, a sufficiency
of water for the purpose of irrigating at least five thousand (5000)
acres of said northern portion, which said five thousand acres are to
be computed as a part of the fifty thousand acres above mentioned.

And the said party of the first part further promises and agrees
that it will promptly construct or cause to be constructed substantial
bridges, not less than twelve feet wide, over the said canal on the
lands of the said parties of the second part, and that it will construct
one such bridge at every six miles over such lands, at such points
as the parties of the second part may designate.

It is hereby further agreed that the parties of the second part
shall not be responsible to the party of the first part, at any time, for
any damages which their cattle may do to the embankments of said
canal; and it is further understood between the parties hereto that
the said party of the first part shall have the privilege of cutting such
brush from the lands of the said parties of the second part
1568 as may be necessary for use in constructing the embank-
ments of said canal over their lands, but such brush shall only
be cut from such places as shall be designated by the parties of the
second part.

The party of the first part further promises, covenants and agrees
to and with the parties of the second part to furnish and give them a
sufficiency of water from said canal for their cattle, and for all do-
mestic purposes for themselves, their tenants and employees, free
of charge.

And the party of the first part hereby further promises, covenants
and agrees to and with the parties of the second part, that should
any damage result to the lands of the parties of the second part by
mismanagement or want of due diligence and care in the construc-
tion and maintenance of said canal, it will pay to them, in gold coin,
the full amount of said damage, whether occasioned by sand, water
or other causes, and to indemnify them fully for all loss thereby
sustained.

It is further covenanted and agreed that the right of way herein
given shall not be transferred, or this contract or any part thereof
assigned by the party of the first part to any person or persons, com-

pany or companies, corporation or corporations whatever, without the written consent of the parties of the second part.

Should the party of the first part fail to perform the covenants and agreements herein contained to be kept and performed on its part, then and in that event, this agreement shall be null and void.

In witness whereof, the said San Joaquin and King's River Canal Company, party of the first part, has caused these presents to be subscribed in its name by the President of said Company, and to be attested by the Secretary of said Company, and the seal of 1569 said Corporation to be hereunto affixed as the act and deed of said Company, and the said Henry Miller and Charles Lux, parties of the second part, have also hereunto set their hands and seals the day and year first above written.

(Executed in Duplicate.)

[SEAL.]

SAN JOAQUIN AND KING'S RIVER
CANAL COMPANY,

By JOHN BENSLEY, *President.*

HENRY MILLER.
CHAS. LUX.

[SEAL.]

[SEAL.]

Signed and delivered in the presence of—

Attest:

L. B. BENSLEY,

*Secretary Pro Tem. of the "San Joaquin
and King's River Canal Company."*

Endorsed: "Agreement The S. J. & K. R. Canal Co. with Miller & Lux." "Published and Filed December 1st 1899. Southard Hoffman, Clerk." "No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al., Complainant's Exhibit No. 6 E. H. H. Master." Filed May 14 1910 Southard Hoffman, Clerk, By J. A. Schuetzler, Deputy Clerk.

1570

COMPLAINANT'S EXHIBIT No. 7.

This indenture of two parts made and entered into this Seventh day of February A. D. 1872 by and between Henry Miller and Charles Lux, of the City and County of San Francisco, State of California, parties of the first part, and The San Joaquin and King's River Canal and Irrigation Company, a corporation incorporated under the laws of the State of California, party of the second part witnesseth

1 First. A certain agreement in writing bearing date May 18th 1871, entered into by the San Joaquin and King's River Canal Company, as party of the first part, and said Henry Miller and Charles Lux, as parties of the second part,—providing among other things, for the construction of a canal by said party of the first part thereto, and for the payment of of certain subsidies in aid thereof by said parties of the second part thereto (which said contract has been, by

the consent of said parties of the second part thereto, assigned by said party of the first part thereto to the party of the second part to this instrument), is hereby by mutual consent annulled and canceled; and neither party has any rights thereunder.

2 Secondly. In full satisfaction of their obligation under said agreement to pay a subsidy in aid of the construction of a canal for the distance for which said canal is already constructed, said parties of the first part hereto have given their two certain promissory notes, bearing even date herewith, each for six thousand six hundred and sixty six $67/100$ dollars, payable in U. S. Gold Coin to the order of Jno. Bensley, President of the San Joaquin and Kings River Canal and Irrigation Company,—one on the first day of August A. D. 1872 and one on the first day of August A. D. 1873.

3 Thirdly. Said parties of the first part hereto hereby covenant and agree to and with said party of the second part hereto, to pay to said party of the second part, on the first day of August 1571 A. D. 1874 the further sum of six thousand six hundred and sixty six $66/100$ dollars in U. S. Gold Coin provided and in case that (and not otherwise) said party of the second part shall before that date

1. Extend its canal (already constructed for about forty miles of its length from Fresno Slough Northerly) so that its whole length from said slough shall not be less than fifty-eight miles, and furnish to said parties of the first part from said canal already constructed, and to be constructed, water sufficient to irrigate fifty thousand acres of land now owned by said parties of the first part, lying between said canal already built, and so to be built, on the West, and the San Joaquin River on the East; or

2. Construct other canal or canals from said San Joaquin River, or some one of its tributaries, or from Tulare Lake,—which shall furnish the water necessary for irrigating said fifty thousand acres of land, as conveniently for use for that purpose as could be done by the extension hereinbefore mentioned, of said canal already constructed, said extension to be at the grade of six inches to the mile.

4 Fourthly. Said parties of the first part do hereby give and grant to said party of the second part, the right of way through and over all and any of their lands in Fresno, Merced and Stanislaus Counties in said State of California, on the West side of the San Joaquin River, for any and all canal and canals which are already, or shall be hereafter, constructed by said party of the second part for irrigation or navigation, and to construct, maintain, keep in repair, and operate the same,—and for tow paths and other necessary appurtenances to such canals; with the right to pass and repass over and upon the adjacent land of said parties of the first part for said purposes, doing always as little damage as possible; said party of the second part to further have the privilege of cutting and taking from the land of said parties of the first part, at such places as they 1572 designate, such brush as may be needed for the construction or repair of said canal or canals over said land,—and also to have the use and benefit of all sloughs on the land of said parties of the first part between the proposed canal and San Joaquin River,

for the purpose of conducting water to said canal, or to make a part thereof.

5 Fifthly. Said parties of the first part do hereby agree to pay to said party of the second part for water furnished by it, used in irrigating each crop, the regular price paid by others for irrigation, not to exceed one dollar and twenty-five cents per acre, for each acre so irrigated of land owned by said parties of the first part.

6 Sixthly. It is further agreed by and between the parties hereto, that in case the canal of said party of the second part shall diminish the natural overflow of the San Joaquin River and its sloughs, which usually occurs between the first day of April and the fifteenth day of June in each year, upon the land of said parties of the first part, then and in such case said party of the second part shall, at any time between said dates, at the request of said parties of the first part, and free of charge and expense to them, permit an overflow from the said canal upon said lands equal to that of which they shall have been so deprived as aforesaid.

7 Seventhly. And it is further agreed, by and between the parties hereto, that should the line of said canal already built, or of some other canal to be built by said party of the second part, not be extended through the Northern portion of the said lands owned by said parties of the first part,—that is to say, Township 8 South, Range 9 East, and Township 8 South, Range 10 East, Mt. Diablo Meridian,—then they, the said parties of the first part, shall have the privilege of conducting from said canal, by means of a branch canal a sufficiency of water for the purpose of irrigating at least five thousand acres of said Northern portion of said land; the same to be reckoned as a part of the 50,000 acres hereinbefore mentioned.

8 Eighthly. Said party of the second part further covenants and agrees to promptly construct, or cause to be constructed, substantial bridges not less than twelve feet wide, over its canal, on the lands of said parties of the first part,—one for every six miles,—at such points as said parties of the first part may direct.

9 Ninthly. It is further agreed that said parties of the first part shall not be responsible to said party of the second part for any damage which their cattle may do to the embankments of the canal of said party of the second part.

10 Tenthly. Said party of the second part further agrees to furnish said parties of the first part a sufficiency of water from its canals for their cattle, and for all domestic purposes of themselves, their tenants and employees free of charge, and further agrees to pay to said parties of the first part in United States gold coin the full amount of any damage resulting to their land from mismanagement, or the want of due diligence and care in the construction, management and maintenance of said canal,—whether occasioned by sand, water or other causes, and to indemnify them fully for all loss thereby sustained.

11 Eleventhly. It is further understood and agreed that the right of way herein given shall not be transferred, nor this contract, nor any part thereof assigned by said party of the second part to any

person or persons, company or companies, corporation or corporations whatever without the written consent of the parties of the first part.

1574 12 Twelfthly. Said party of the second part agrees to furnish water for the irrigation of the 50000 acres of land belonging — said parties of the first part, hereinbefore mentioned as follows, to-wit: whenever required by said parties of the first part for irrigation at any time in the year 1872 after the first day of April, water enough to irrigate 16667 acres; whenever required for irrigation, after the first day of April, in the year 1873 by said parties of the first part, enough water to irrigate 16667 acres additional or 33334 acres in all; and by the first day of August A. D. 1874 enough water to irrigate 16666 acres additional making 50000 acres in all. And in case water shall not be furnished as aforesaid the subsidy to be paid hereunder shall be proportionally reduced, so that the amount of subsidy paid in each year by said parties of the first part shall bear the same proportion to that hereinbefore provided to be paid in such year, as the area of land for which water shall be furnished in each year, as provided hereunder shall bear to the area for which water is hereinbefore provided to be furnished in such year.

Water to be furnished under and according to the rules of the corporation party of the second part hereto, and the reduction of subsidy above provided for to be in lieu of all claims for damages for not furnishing water as agreed.

In testimony whereof said parties of the first part have set their hands and seals, and said party of the second part has caused its corporate seal and the hands of its President and Secretary to be affixed to this and another instrument of like tenor and date the day and year first above written.

HENRY MILLER. [SEAL.]

CHAS. LUX. [SEAL.]

JOHN BENSLEY,

Pres. S. J. & K. R. C. & I. Co.

SAMUEL I. C. SWEZCY,

Sec. S. J. & K. R. C. & I. Co.

[SEAL.]

In the Presence of

GEO. A. NOURSE.

1575 STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this Twelfth day of November A. D. one thousand eight hundred and seventy nine before me, Sam'l S. Murfey, a Notary Public, in and for the said City and County residing therein duly commissioned and sworn, personally appeared John Bensley known to me to be the president of the San Joaquin and Kings River Canal and Irrigation Company, the corporation that executed the foregoing Contract and acknowledged to me that such corporation executed the same.

And I do further certify that at the same date before me personally appeared Geo. A. Nourse, personally known to me to be the

same person whose name is subscribed to the foregoing Contract as a witness thereto, who being by me duly sworn, deposes and says that he resides in the City of Oakland, that he was present and saw Samuel I. E. Swezey known to him to be the secretary of the San Joaquin and Kings River Canal and Irrigation Company, the Corporation that executed the foregoing contract,—and whose name is subscribed to and who executed the said Contract as Secretary of said Corporation *and saw him* sign seal and deliver the same as such Secretary and that he, the deponent, thereupon signed his name as subscribing witness thereto.

In witness whereof, I have hereunto set my hand and affixed my official seal at my office the day and year last above written.

[SEAL.]

SAMPL S. MURFEY,

Notary Public.

1576 STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this Twelfth day of November, A. D. One Thousand Eight Hundred and Seventy-nine before me, Sam'l S. Murfey, a Notary Public, in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared Henry Miller and Charles Lux, known to me to be the persons described in and who executed and whose names are subscribed to the within and annexed instrument, and they each acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my Official Seal, the day and year in this Certificate first above written.

[SEAL.]

SAMPL S. MURFEY,

Notary Public.

Endorsed: (See #219) —52— Contract. Miller and Lux with The San Joaquin and Kings River Canal and Irrigation Company. Dated February 7th, 1872. Recorded at request of Wells Fargo & Co. at 10 min. past 8 o'clock A. M., this 14th November, 1879, in Book C of Covenants, Records of Fresno Co., Cal., pp. 254 et seq. \$4.75. A. M. Clark, Recorder. Recorded at request of Wells Fargo & Co. at 30 min. past 8 o'clock A. M., Novbr. 21st, 1879, in Book B of Agreements page 59 et seq., Records of Merced Co. \$4.75. G. J. Hamilton, Recorder, by M. Walsh, Dep-ty. No. 8636. Plaintiff's Exhibit No. 42. Filed Mch. 27, 1900. G. W. Cartwright, Clerk. By A. D. Ewing, Deputy. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Compl't's Exhibit No. 7. E. H. H. Master. Filed May 14, 1910. Southard Hoffman, Clerk. By J. A. Schaertzer, Deputy Clerk.

1577

COMPLAINANT'S EXHIBIT No. 8.

This instrument, made this Twelfth day of November A. D. 1879, by and between the San Joaquin and Kings River Canal and Irrigation Company, a corporation organized and existing under the laws of the State of California, the party of the first part and Henry Miller and Charles Lux, the parties of the second part, witnesseth:

Whereas, differences have existed between the respective parties hereto in relation to the construction of a contract made by and between said parties bearing date the seventh day of February, 1872, and a suit is now pending wherein said construction is involved.

And whereas, a committee was appointed by the Board of Trustees of said corporation on the 28th day of August, 1879, "to take steps "to settle without further litigation all matters in dispute in suits "now pending between this Company and Miller & Lux:"

And said Committee afterwards reported to said Board of Trustees in writing in which a settlement of said matters was recommended upon the terms therein set forth, and said recommendation was concurred in by the owners of more than three-fourths of the Capital stock of said corporation, to which said report and recommendation now on file among the records of said corporation reference is here made for greater certainty;

And whereas, said parties of the second part have consented to settle and compromise all said matters of difference upon the terms recommended by said committee and stockholders and the said party of the first part by its Board of Trustees on the 30th day of October, 1879, duly passed a resolution approving of said settlement and compromise, and authorized the President and Secretary of said corporation to carry said resolution into effect.

1578 Now in consideration of the premises, it is covenanted and agreed as follows:

First. Said parties of the second part in consideration of the premises and of the covenants herein made by the party of the first part shall forthwith upon the execution of this instrument make, execute and deliver to the said San Joaquin and Kings River Canal and Irrigation Company a deed which shall convey the right of way for said canal where the same passes through or over their lands, of a width of one hundred (100) feet on each side of the center line of said canal.

Second. Said party of the first part in consideration of the premises and of the execution and delivery of said deeds hereby covenants and agrees, that subdivision Fifth of the contract referred to as Exhibit "A" in the complaint filed in that certain action now pending in the District Court of the Nineteenth Judicial District of the State of California in and for the City and County of San Francisco, entitled "The San Joaquin and Kings River Canal and Irrigation Company vs. Henry Miller and Charles Lux," being the same contract hereinbefore referred to and bearing date the seventh day of February, A. D. 1872, shall be construed to mean that this Company, the party of the first part herein, will deliver water

thereunder at its regular rates not exceeding one dollar and twenty-five cents per acre per crop, provided the crops are cut, but in case the alfalfa lands should be pastured, then each supply of water of the usual quantity supplied to produce a crop shall be deemed to be such a supply as will entitle a charge to be made therefor the same as if a crop shall be cut, and said subdivision shall likewise apply with the proviso aforesaid, to said Miller and Lux, their tenants, employes, heirs, executors and administrators, and shall run with the land so long as this Company exists, to the extent of thirty-three thousand three hundred and thirty-three and one third (33,333 1/3)

acres, but shall not apply to the grantees of said Miller and Lux, nor to the grantees of their heirs, executors, or administrators; and subdivision Tenth of said contract shall apply to all domestic animals owned, pastured or cared for by Miller and Lux, their tenants, employes, heirs, executors or administrators.

In witness whereof, the said The San Joaquin and Kings River Canal and Irrigation Company has hereunto set and affixed its corporate name and seal the day first above written by Joseph Sedgley, its President and F. L. Palmer, its Secretary, thereunto duly authorized, and the parties of the second part have hereunto set their hands and seals the day and year first above written.

THE SAN JOAQUIN AND KINGS RIVER
CANAL AND IRRIGATION COMPANY,

[SEAL.] By JOS. SEDGLEY, *President*.

F. L. PALMER, *Secretary*.

CHAS. LUX.

HENRY MILLER.

[SEAL.]

[SEAL.]

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this Twelfth day of November, A. D. One Thousand Eight Hundred and Seventy-Nine, before me, Sam'l S. Murfey, a Notary Public, in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared Jos. Sedgley, known to me to be the President, and F. L. Palmer known to me to be the Secretary of The San Joaquin and Kings River Canal and Irrigation Company, the corporation that executed the foregoing instrument, and acknowledged to me that such Corporation executed the same.

1580 In Witness Whereof, I have hereunto set my hand and affixed my official seal the day and year in this Certificate first above written.

[SEAL.]

SAM'L S. MURFEY,

Notary Public.

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this Twelfth day of November A. D. One Thousand Eight Hundred and Seventy-nine before me, Sam'l S. Murfey, a Notary Public, in and for the said City and County, residing therein, duly

commissioned and sworn, personally appeared Charles Lux and Henry Miller, known to me to be the persons described in and who executed and whose names are subscribed to the within and annexed instrument, and they each acknowledged to me that they executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal, the day and year in this Certificate first above written.

[SEAL.]

SAM'L S. MURFEY,

Notary Public.

Endorsed: Agreement. San Joaquin and Kings River Canal and Irrigation Company with Henry Miller and Charles Lux. Dated November 12th, 1879. Recorded at request of Wells Fargo & Co. at 15 min. past 8 o'clock A. M. this 14th November 1879 in Book C of Covenants, Records of Fresno Co. Cal. pp. 262 et seq. H. M. Clark, Recorder. Recorded at request of Wells Fargo and Co. at 35 min. past 8 o'clock A. M. Nov'r 21st 1879 in Book B of Agreements page 66 et seq. Records Merced Co. G. J. Hamilton Recorder by M. H. Walsh, Dep-ty. \$2.75. U. S. Circuit Court, N. Dist. of Cal. The San Joaquin and Kings River Canal and Irrigation Co. vs. The County of Stanislaus et al., Complainants. No. 12257. Exhibit No. 6. E. H. H. Examiner. Filed May 14 1910 Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk. Published and Filed December 1st, 1899, Southard Hoffman, Clerk. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 8 E. H. H. Master.

1581

COMPLAINANT'S EXHIBIT No. 9.

This Agreement, made this 24th day of December, 1897, by and between The San Joaquin and Kings River Canal and Irrigation Company, a corporation organized and existing under the laws of the State of California, the party of the first part, and Miller & Lux, a corporation organized and existing under the laws of said State, the party of the second part, Witnesseth:

Whereas, on the 3rd. day of June 1897, Henry Miller individually and as surviving partner of the late firm of Miller & Lux, and the executor, heirs, devisees and legatees of Charles Lux, deceased, conveyed to the said party of the second part all of the property, assets and effects of said late firm of Miller & Lux; and,

Whereas, said Henry Miller and the executor, heirs, devisees and legatees of said Charles Lux, are the only persons interested in said Miller & Lux, said corporation, and for that reason said corporation (Miller & Lux), is considered by the parties hereto to be entitled to the rights, benefits and privileges hereinafter granted;

Now, Therefore, it is agreed by and between the parties hereto, that all the rights, benefits and privileges secured to Henry Miller and Charles Lux by a certain agreement made between them and the party of the first part on the 7th. day of February, 1872, and

by a certain further and supplementary agreement made between said parties on the 12th. day of November, 1879, have vested and shall inure to the benefit of the party of the second part, its tenants and employees, in the manner and as fully and effectually as they vested in and inured to the benefit of said Henry Miller and Charles Lux, but subject however, to all the conditions in said contracts expressed and contained.

And it is further agreed that the true intent and meaning of so much of the second paragraph of said last mentioned contract as relates to the rates to be paid by said Miller & Lux for water furnished for irrigation, is, that the said Henry Miller and Charles Lux were to pay, and the said party of the second part is to pay for each crop irrigated, or for water furnished of the usual quantity supplied to produce a single crop, one-half of the regular rates per season of two crops, but not in any case to exceed one dollar and twenty-five cents (\$1.25) per acre per crop.

In Witness Whereof, this agreement has been executed in duplicate, by the Vice President and Secretary of the party of the first part, and by the President and Secretary of the party of the second part, under the corporate seals of said respective corporations, they having been respectively authorized thereto by resolution of the Boards of Directors of said corporations respectively.

[SEAL.]

THE SAN JOAQUIN & KINGS RIVER
CANAL & IRRIGATION CO.,

By J. LEROY NICKEL,

Vice President,

And by C. Z. MERRITT, *Secretary.*

[SEAL.]

MILLER & LUX,

By HENRY MILLER, *President,*

And by DAVID BROWN, *Secretary.*

Errata: The word "succeed" in line 8 above should read "exceed". See Minutes of S. J. & K. R. C. & I. Co. Vol. 2, page 39.

C. Z. M.

Endorsements: "Agreement. The San Joaquin & Kings River Canal & Irrigation Co. with Miller & Lux. M. & L.'s copy recorded. U. S. Circuit Court, N. Dist. of Cal. The San Joaquin and Kings River Canal and Irrigation Co. vs. The County of Stanislaus, et al. No. 12257. Complainant's Exhibit No. 22 E. H. H. Examiner. Published and filed December 1st 1899. Southard Hoffman, Clerk. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. County of Stanislaus, et al. Complainant's Exhibit No. 9. E. H. H. Master. Filed May 14 1910. Southard Hoffman, Clerk. By J. A. Schaertzer, Deputy Clerk.

1583

COMPLAINANT'S EXHIBIT No. 10.

This Agreement, made this 18th day of May, 1899, by and between The San Joaquin and Kings River Canal and Irrigation Company, a corporation organized and existing under the laws of the State of California, the party of the first part, and Miller & Lux, also a corporation organized and existing under the laws of said State, the party of the second part,

Witnesseth: That, whereas, prior to the construction of the canal of the party of the first part, Henry Miller and Charles Lux were the owners of lands lying along and bordering upon the San Joaquin River, and its sloughs, in said State, and lying above and below the head of the canal of the party of the first part, and were

[Seal.] the owners of riparian rights in and to the waters of said rivers and sloughs, and had been accustomed to and did actually use the waters of said river and sloughs which naturally overflowed said lands, and also to take water therefrom by artificial means, for the purpose of irrigating said lands and furnishing water for their cattle and livestock, and for other domestic uses, in accordance with their said riparian rights:

And, whereas, said Henry Miller and Charles Lux, for the purpose of aiding the construction of said canal of the party of the first part, did pay to the party of the first part a subsidy in money, and conveyed to it a right of way for its said canal where the same passed through the lands of said Henry Miller and Charles Lux of a width of one hundred (100) feet on each side of the center line of said canal, and permitted the party of the first part to appropriate and divert from said river through said canal eight hundred (800) cubic feet per second of the water flowing in said river:

And, whereas, at all times since said appropriation was made by the party of the first part said Henry Miller and Charles Lux, and said Henry Miller, as the survivor of them, and the party of the second part (as the successor in interest of said Henry Miller and

Charles Lux) continued, as said riparian owners, to use the
1584 overflow waters of said river and sloughs upon said lands for the aforesaid purposes, and also to use, for the purpose of irrigating uncultivated land, and furnishing water for their live stock and for other domestic uses, and with the consent of the party of the first part, and without any charge therefor by it, the surplus water running in said canal not used or required by the water consumers of the party of the first part other than said Henry Miller, Charles Lux, and the party of the second part;

And, whereas, during all said times it was understood by all said parties that said Henry Miller and Charles Lux, and said Henry Miller, as the survivor of them, and said party of the second part, as the successor in interest of them, were of right entitled to the said use, without charge, of the said surplus water in said canal; and that said party of the first part was of right entitled to

[Seal.] waste said surplus water on said uncultivated lands:

And, whereas, the party of the second part has agreed

to permit the party of the first part to appropriate and divert from said river, through its "Outside Canal", three hundred and fifty (350) cubic feet, per second of the water flowing in said river, in addition to the aforesaid eight hundred (800) cubic feet per second;

Now, therefore, in consideration of the premises, and to the end that the rights of the respective parties hereto, as heretofore understood and recognized, may be fixed and established, the party of the first part does hereby confirm unto said party of the second part the right to use, for the purposes of irrigating the said uncultivated lands above referred to, and of furnishing water for its cattle and live stock, and for other domestic uses, free of cost or charge to it, all or so much of the surplus water running in the canals of the party of the first part as the party of the second part may desire to use for said purposes, and which may not be used or required by the other water consumers of the party of the first part, and said party of the second part does hereby confirm unto said party of the first part the right to waste said surplus water on said uncultivated land.

1585 And the party of the first part does hereby acknowledge and declare that it has no claim to make against the party of the second part, or its predecessors in interest, on account of the use heretofore made by it and then of said surplus water.

In Witness Whereof the said parties hereto have caused these presents to be subscribed by their respective presidents and secretaries, under their respective corporate seals, all on the day and year first above written.

[SEAL.]

THE SAN JOAQUIN & KINGS RIVER
CANAL AND IRRIGATION CO.,

By HENRY MILLER, *President*.

By C. Z. MERRITT, *Secretary*.

[SEAL.]

MILLER & LUX,

By HENRY MILLER, *President*.

By DAVID BROWN, *Secretary*.

Endorsed: Filed May 14 1910. Southard Hoffman, Clerk. By J. A. Schaertzer, Deputy Clerk. Agreement of the San Joaquin & Kings River Canal & Irrigation Company with Miller & Lux. Dated 18th May 1890. No. 14554. In U. S. Circuit Court. Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Compl'ts Exhibit No. 10. E. H. H. Master, etc.

1586

COMPLAINANT'S EXHIBIT No. 11.

San Joaquin River.

Discharge Table, in Second Feet, With Depths Corresponding to Gauge in Weir at Head of Lone Willow Slough.

Basis of computation, from gauging of River made on August 9th, 1900, at a point fifty feet above Lone Willow Slough.

Gauge reading.	Second feet.
3.00 Feet.....	473 Second Feet
3.10 ".....	500 "
3.20 ".....	548 "
3.30 ".....	595 "
3.40 ".....	645 "
3.50 ".....	719 "
3.60 ".....	774 "
3.70 ".....	827 "
3.80 ".....	887 "
3.90 ".....	945 "
4.00 ".....	1005 "
4.50 ".....	1324 "
5.00 ".....	1691 "
5.50 ".....	2076 "
6.00 ".....	2499 "
6.50 ".....	2945 "
7.00 ".....	3454 "
8.00 ".....	4503 "
9.00 ".....	5647 "
10.00 ".....	6883 "

1587 This agreement, made this seventeenth day of August A.

D. 1898, between the San Joaquin & Kings River Canal & Irrigation Company, a corporation, the party of the first part, the California Pastoral & Agricultural Company, a corporation, the party of the second part, and Miller & Lux, a corporation, the party of the third part, witnesseth:

Whereas, on the 11th day of August, 1871, W. S. Chapman and Henry Miller and Charles Lux made and entered into an agreement for the construction of a canal to take water from the San Joaquin River, and for the maintenance of such canal after it should be constructed, and providing for the distribution of water that should be taken into said canal, a copy of which said contract is hereto annexed, and marked "Exhibit A".

Whereas, the party of the second part hereto, has by proper assignment acquired all of the interest of the said William S. Chapman; and the party of the third part hereto has by proper assignment acquired all of the interest of the said Henry Miller and Charles Lux in said agreement and in said Chowchilla Canal, and in all the water

said Canal is entitled to receive from the San Joaquin River or from said slough, and—

Whereas, the party of the third part hereto, Miller & Lux, are the owners of and entitled to take and receive all the water now flowing, or that may hereafter flow in the said slough through which said Chowchilla Canal now takes and receives its water, after the full amount of water which said Chowchilla Canal is entitled to receive through such Slough is supplied to and received by and into its said Canal, at the Head Gate and Weir hereinafter referred to, and—

Whereas, the party of the first part hereto, the San Joaquin and Kings River Canal and Irrigation Company, is the owner of Canals which are taking water from the said San Joaquin River, and are entitled to take and receive water from said River into said Canals, and—

1588 Whereas, differences have arisen between the parties hereto as to the rights of the said parties of the first, second and third parts hereto, to take water from the said San Joaquin River, and also as to the amount of water they are each entitled to take and receive from the said River, and as to their priorities in such water.

Now, therefore, for the purpose of settling and adjusting said differences as between the parties hereto, it is hereby agreed,

1. That said party of the first part has the prior right to divert from the San Joaquin River, at all times, sufficient water so that its canal shall have and receive Seven Hundred and Seventy-five (775) cubic feet of water per second, measured at a point in its main canal immediately above the head of the branch of said canal which is known as the Poso Canal, and where said Main canal passes through the North West quarter (N. W. $\frac{1}{4}$) of Section Thirty three (33), Township Twelve (12) South of Range Fourteen (14) East, such measurement to be made by means of a gauge placed in said canal, or by means of other proper measuring device. But it is understood and agreed, that in the event said party of the first part shall at any time take and divert any of such Seven Hundred and Seventy-five (775) feet of water, to which the said party of the first part has the first and prior right into its new Canal, which is constructed so that it can take water from the main canal of the said party of the first part hereto, at a point above said point of measurement, then and in that event the water so taken into said new canal shall be measured, and said party of the first part shall, in such case, receive at the point of measurement hereinabove specified, Seven Hundred and Seventy-five (775) feet of water per second, less the amount so diverted and taken into said new canal, that is to say, the amount of water so diverted and taken into such new canal, shall be deducted from the Seven Hundred and Seventy-five (775) feet of water to which said party of the first part has, under the terms of this agreement, the first and prior right.

1589 2. That whenever the canal of said party of the first part is supplied with Seven Hundred and seventy-five (775) cubic feet of water per second at the point of measurement hereinbefore referred to, then so long as that quantity is so supplied thereto, the parties of the second and third parts, as the owners of said Chowchilla

Canal, above referred to, shall have the right, jointly, to divert from said San Joaquin River through said Slough, sufficient water so that said Chowchilla Canal shall have and receive into its said Canal, at the present Headgate or Weir in said Canal and in the Slough hereinabove referred to, where it passes through the South West quarter (S. W. $\frac{1}{4}$) of Section Fourteen (14), Township (13), South of Range Fifteen (15) East, One hundred and Twenty (120) cubic feet of water per second, provided there is sufficient water flowing in said San Joaquin River to supply to said party of the first part hereto, its full Seven Hundred and seventy-five (775) cubic feet of water, and also supply or furnish said Chowchilla Canal the maximum amount of water it is entitled to take and receive through said Slough and through said gate, to-wit: One Hundred and Twenty (120) cubic feet of water per second.

In the event that there be not sufficient water flowing in said San Joaquin River to supply to said party of the first part its full Seven Hundred and Seventy-five (775) cubic feet of water, and supply to the said Chowchilla Canal One Hundred and Twenty (120) cubic feet of water, then said Chowchilla Canal shall be entitled to take and receive from said River, and from said Slough, and through said gate, only the amount of water flowing in said river after the full Seven Hundred and Seventy-five (775) cubic feet of water per second is supplied to said party of the first part at the point of measurement hereinbefore specified.

3. After the amount of water which the said party of the second part shall be entitled to take and receive into its said canal at 1590 its said Headgate or Weir is received by it, the balance of the water running in said slough above the said headgate, if any, shall belong to said party of the third part hereto. But it is understood that this agreement, neither fixes nor limits any rights of Miller & Lux, the party of the third part hereto, to the water flowing in said San Joaquin River, after the diversion therefrom of said quantities of Seven Hundred and Seventy-five (775) feet and One Hundred and twenty (120) feet herein provided for.

4. When the water in said San Joaquin River is at such low stage that the said party of the second part is not, under this agreement, entitled to receive into its said Canal sufficient water out of said One Hundred and twenty (120) feet to supply the party of the second part in said Canal with stock water, then and in that event, the said party of the second part shall be entitled to receive from the water flowing in the said San Joaquin River, and belonging to the said parties of the first part hereto, sufficient water for such stock purposes, provided there is sufficient water flowing in said San Joaquin River and in the canals of the said party of the first part to supply all of the parties having a prior right to demand and receive water from the Canals of said party of the first part, the San Joaquin and Kings River Canal and Irrigation Company, and to also supply such stock water to the said party of the second part, such stock water so furnished to said party of the second part hereto by said party of the first part, to be turned into the Canal of said party of the second part by the Superintendent of the party of the first part, and to be paid

for at the rates established for water sold by said party of the first part.

5. The agreement of said April 11, 1871, hereinbefore referred to, and to which this is supplemental, shall remain in full force and effect, except insofar as modified by this supplemental agreement:

Provided, that the water at any time flowing in said Chowchilla Canal shall be equally divided between the parties of the second and

third parts by actual measurement made at the point where

1591 said party of the third part is, at that time, diverting water from said canal. If the said party of the third part desires to divert water at more than one point on said canal at the same time, then such measurement shall be made at each of such points, so that said party of the third part shall receive at the second or any subsequent point, only such proportion of the water then flowing at such point as, when added to the proportion of the water diverted by it at prior points, shall equal one-half.

6. That certain action in which the party of the first part is plaintiff and the party of the second part is defendant, number 63,006, in the Superior Court of the City and County of San Francisco, State of California, shall be dismissed without costs to either party; and the said party of the second part hereby releases the party of the first part, and the sureties upon its injunction bond in said action, from all claims or liabilities whatsoever, arising or to arise out of the granting of the injunction in said action.

In witness whereof, the said parties hereto have caused these presents to be executed by their respective presidents and secretaries under their respective corporate seals; the same being duly authorized by resolutions of the Board of Directors of said corporations respectively, duly entered upon their minutes.

[SEAL.]

THE SAN JOAQUIN & KINGS RIVER
CANAL & IRRIGATION CO.,

By HENRY MILLER, *President*,

By C. Z. MERRITT, *Secretary*,

[SEAL.]

MILLER & LUX,

By HENRY MILLER, *President*,

By DAVID BROWN, *Secretary*,

[SEAL.]

THE CALIFORNIA PASTORAL &
AGRICULTURAL CO.,

By F. MENZIES, *President*,

JOHN CRAWFORD, *Secretary*.

1592

"EXHIBIT A."

This agreement, made and entered into this 11th day of August A. D. 1871, by and between William S. Chapman, party of the first part, and Henry Miller and Charles Lux, parties of the second part, all of the City and County of San Francisco.

Witnesseth:

That said party of the first part, for and in consideration of the sum of one dollar to him in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged before the

signing and delivery of these presents, and the further consideration of the mutual promises herein contained and set forth to be done and performed by the parties hereto, does hereby covenant and agree to and with the said parties of the second part, and the said parties of the second part do hereby covenant and agree to and with the said party of the first part, that they will jointly dig and construct a canal for irrigation through lands of said parties of the second part in the County of Fresno, and State of California, the said Canal to commence at a point where a slough now makes out from the north side of the San Joaquin River, near the center of the dividing line between Sections Twenty-four (24) and Twenty-five (25) in Township Thirteen (13) South, Range Fifteen (15) East, from the Mount Diablo Base and Meridian, and thence running in a northerly direction to the north line of the most southern tier of Sections in Township Twelve (12) South, Range Fifteen (15) East, from said Base and Meridian; which said Canal is to be Twenty-five (25) feet wide, and shall be so constructed as to carry one and one-half (1½) feet of water in depth, and it is further agreed that the Slough above mentioned may be used as a part of said Canal as far as shall be deemed advisable.

And it is further agreed by and between the parties hereto, that the said work of constructing the said canal shall be done under the direction and management of a competent engineer, to be selected by the parties hereto, and also the supervision of said parties.

1593 the said engineer to be paid for his services by the parties of the first and second parts, each party paying one-half, said work to be done in a thorough workmanlike manner, with all necessary head gates, bulkheads, flood gates, and other necessary appurtenances, at as moderate expense as may be consistent with thorough work, and the expense of said works and of the repairs thereof shall be borne equally by said parties, that is to say, one-half by said party of the first part, and the other half by said parties of the second part; it being, however, understood and agreed that the said parties of the second part shall have the right of furnishing and having their own teams, vehicles and drivers employed in the construction of their portion of said canal and works; and the value of such work so done by said teams, vehicles and drivers shall be allowed to said parties of the second part in estimating the half to be paid by them in the construction of the canal and works aforesaid; and it being further understood and agreed that said parties of the second part shall at their own expense construct and put in all the side gates and other works which may be required for taking out water from the said canal within the distance above specified.

And it is further understood and agreed that said parties of the second part and their assigns shall have the right at all times to draw from said canal, without charge, by side-gates and ditches and to use and dispose of one-half of the water flowing therein, and said party of the first part and his assigns are to have the right at all times, also without charge, to take at the northerly end of said canal, and to use and dispose of the remaining half of such water, and to carry the same further on by another canal or other canals, to be used as he may see fit, and further to enter upon and go on the

land of said parties of the second part, with men and teams, over which said canal may pass, for the purpose of repairing the said canal, at any time, doing as little damage as is possible thereby.

And it is further agreed by and between the parties hereto, that should the said canal diminish the natural over-flow which usually occurs between the 1st day of April and the 15th day of

1594 June of each year, of the San Joaquin River and its Sloughs, upon the said lands of the parties of the second part, then the said parties of the second part shall, at any time between said dates, open the gates of said canal, and, free of expense or charge to them, the said parties of the second part, shall be allowed an overflow from the said canal on said lands equal in quantity of water to that of which they may be deprived as aforesaid; and it is further covenanted and agreed by and between the parties hereto, that the said canal shall not diminish the water in any branch slough connected with the main slough aforesaid from which the said canal is constructed, from the 1st day of April to the 15th day of June in any year. Neither of these last two provisions or covenants to apply to any season or part of season when without said canal there would be no natural overflow of said river upon the lands of said parties of the second part.

And it is further covenanted and agreed that no work of any kind shall be done in the construction of said canal or anything connected therewith, which shall in any way injure the works of the San Joaquin and Kings River Canal Company.

And it is further covenanted and agreed that should said parties of the second part find it necessary in order to irrigate their lands or any portion thereof, to put a lock and dam or locks and dams in said canal, that they shall have the right to do so, not impairing the rights of said parties of the first part in so doing, nor impeding the flow of the water to be carried by said ditch to which he is entitled, and further, that a bridge shall be built over said canal, on the lands of the parties of the second part, at a point to be designated by them, at the joint expense of the parties hereto, each party paying one-half of said expense, and shall be kept in repair likewise at their joint expense.

And it is further agreed that the said parties of the second part shall not be liable in damages to said party of the first part for any injury which shall be done to the banks of said canal by the cattle of said parties of the second part.

1595 In witness whereof, the parties hereto have hereunto set their hands and seals the day and year first above written.

WM. S. CHAPMAN. [SEAL.]
MILLER & LUX. [SEAL.]
— — — [SEAL.]

Signed, sealed and delivered, being first duly stamped, in the presence of

GEORGE HARRIS.

Know all men by these presents: that the parties of the first part and second part respectively to the within agreement, have jointly completed the canal provided therein to be built, and have jointly extended the same, from the terminus originally proposed, to the South line of Township Eleven (11) South, Range Fifteen (15) East from the Mount Diablo Base and Meridian; that a full and complete settlement and adjustment has been had between said parties of the first and second part of the amount contributed by each to the expense of constructing said canal;—that each has now paid his share of the expense of such construction, and that the said canal, with its gates, sluices, embankments, and all the privileges and appurtenances thereto belonging, or in anywise appertaining, is now owned in common by them from its commencement to said Township line; that is to say: one undivided half by said party of the first part, and one undivided half by said parties of the second part. The expense of keeping in repair the canal so owned in common shall be equally borne,—one-half by said party of the first part, and one-half by said parties of the second part.

Said party of the first part is to be at liberty to take out from said Canal for use upon any land owned by him, any portion of his half of the water in said canal at any point therein, not to interfere with any rights of said parties of the second part.

In testimony whereof, said parties of the first and second parts have hereunto set their hands and seals this sixteenth day of January, A. D. 1872.

WM. S. CHAPMAN, [SEAL.]

MILLER & LUX, [SEAL.]

By HENRY MILLER.

1596 Endorsements: Agreement between San Joaquin and Kings River Canal and Irrigation Company, California Pastoral & Agricultural Company, and Miller & Lux (a corporation). Dated 17th August, 1898. Copy sent to Schmitz 3/3/99. For decision of U. S. Court of Appeals as to construction of this agreement: see #8-72 & 73. Sept. 21, '08 Copy sent to Clyne. See also our letter to him 9/22/08. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Complainant's Exhibit No. 11. E. H. H., Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1597

COMPLAINANT'S EXHIBIT No. 12.

This agreement, made this 4th day of June, 1901, by and between The California Pastoral and Agricultural Company, a corporation, the party of the first part; Miller & Lux, a corporation, the party of the second part; The San Joaquin and Kings River Canal and Irrigation Company, a corporation, the party of the third part; Henry Miller, the party of the fourth part, and Thomas B. Bishop and Azro N. Lewis, as trustees of the estate of Miranda W. Lux, deceased; Henry Lux, Magdalena Holtzscherer, Dorothea Rott, Henry Roeh-

rig, Senior; Henry Roehrig, Junior; Salome Lux Wolf, Caroline Lux Michel, George Lux, Emil Lux, Lizzie Lux Pott, Lena Lux MacBride, and Henry Lux, trustee under the deed of trust made to Henry Lux and Marguerite Lux, on the 19th day of November, 1895, by Charles Henry Lux, the parties of the fifth part, witnesseth:

Whereas the said parties hereto are severally the owners of certain tracts of land situated in the counties of Fresno, Madera, Merced and Stanislaus, in the State of California, portions of which lands are riparian to the San Joaquin River and other portions of which are riparian to the Fresno River; and said parties respectively claim certain rights in and to the waters of said rivers by virtue of their said riparian ownership, and by virtue of certain appropriations of said waters;

And whereas certain differences and disputes have arisen between said parties as to their respective rights in the waters of said rivers,—certain of which disputes were settled and adjusted by a certain agreement, dated the 17th day of August, 1898, between the parties of the first, second, and third parts hereto,—and certain of which differences and disputes were not adjusted by said last mentioned agreement;

Now therefore, for the purpose of settling and adjusting all of said differences and disputes, and of finally determining and defining the rights of the said parties hereto, as between themselves, in and to the waters of said rivers, it is hereby agreed by and between the said parties as follows:

1. That certain agreement, bearing date the 17th day of August, 1898, between the parties of the first, second, and third parts hereto, with relation to the use of certain waters of the San Joaquin River through what is known as the Chowchilla Canal, is hereby in all respects ratified and confirmed.

1598 2. Subject to the provisions of said last mentioned agreement, and also subject to the provisions of that certain other agreement between the parties of the second and third parts hereto, bearing date the 18th day of May, 1899, the said party of the third part shall have the right at all times to divert from the said San Joaquin River 1350 cubic feet of water per second.

3. Subject only to the diversions provided for in said two agreements and in the second paragraph of this agreement, the said party of the second part shall at all times have the right to divert from the said San Joaquin River so much water as it may desire.

4. Subject to the provisions of paragraphs one, two, and three of this agreement, and whenever there is sufficient water in the said San Joaquin River, at the head of that certain canal known as the Blythe Canal, (which heads in said river at a point in the northeast quarter of Section 13, in Township 11 South, Range 13 East, Mount Diablo Meridian), to supply 100 cubic feet of water per second to that canal, the said party of the first part may take water through that canal for the irrigation of that certain tract of land situated in the County of Madera, State of California, and bounded and described as follows:

Beginning at a point at the intersection of the south line of Sec-

tion 12, in Township 11 South, Range 13 East, Mount Diablo Meridian, with the San Joaquin River, and running thence east to the southeast corner of the southwest quarter of Section 8, Township 11 South, Range 14 East; thence Northwesterly in a direct line to the southwest corner of the northwest quarter of Section 24, in Township 10 South, Range 13 East; thence west to the center of section 22 in said township; thence north to the center of section 15 in said township; thence northwesterly in a direct line to the northwest corner of section 33 in township 9 South, Range 13 East; thence west to the northwest corner of the northeast quarter of the northeast quarter of section 31 in said township; thence south to the San Joaquin river; thence up and along the said San Joaquin River to the place of beginning.

And it shall be the duty of the said party of the first part to take water for the irrigation of said land through said canal whenever there is the aforesaid quantity of water in said river and the same can be advantageously used for irrigating said land, and to use its best efforts to irrigate that land from that source.

5. Whenever the said party of the first part shall be unable to irrigate said land from that source by the first day of June in any year, the said party of the second part, on demand of the party of the first part, whenever there are 2500 cubic feet of water flowing per second in said San Joaquin River at that certain gauge known as the White House Gauge, situated near the head of Lone Willow Slough, shall deliver to the party of the first part, through said Lone Willow Slough or other convenient channel, at the center of the south line of the southeast quarter of section 7, in Township 11 South, Range 14 East, as much as 100 cubic feet of water per second, (or a greater quantity at the option of the party of the second part), to complete the irrigation of the land aforesaid, but not to exceed in all a quantity equal to a constant flow of 100 cubic feet of water per second for thirty-six days in any one irrigating season.

6. If the said party of the second part shall at any time divert from said San Joaquin River, above said White House Gauge, more than 300 cubic feet of water per second, the excess so diverted above said 300 cubic feet per second shall be computed as a part of the water flowing in said river whenever necessary to make up the said quantity of 2500 cubic feet per second.

7. Whenever the said party of the first part shall have commenced to irrigate the said land through said Blythe Canal, it must complete the irrigation of all of said land within each check, if possible, before turning the water into a lower check, otherwise it shall have no claim to receive water from the party of the second part for irrigation during that season; and after it has turned the water out of any check it shall not be entitled to call on the party of the second part for any water to irrigate the land within that check.

8. The said party of the second part shall at all times be entitled to carry on to any land owned or rented by it below the lands of the party of the first part any water remaining after the above described lands of the party of the first part, and those described in paragraph nine, have been irrigated, and said party

of the second part shall have the right to construct, maintain, and use, through the lands of the party of the first part, a ditch or canal to carry water from said Lone Willow Slough, which ditch shall be located and constructed as nearly as practicable along the bottom of the depression extending through said lands of the party of the first part, and shall be so constructed and operated as not to injuriously dam or back up on the lands of the party of the first part any waters coming thereon from any source, and shall be provided with suitable stopgates at each levee of the irrigation system of the party of the first part. The party of the second part will construct and maintain two wagon bridges across said canal for the convenience of the party of the first part, one to be located at a point in the southeast quarter of the southeast quarter of Section 15, Township 10 South, Range 13 East, and the other in Section 9 of the said township and range; said bridge- to be constructed whenever their points of location have been fixed by the party of the first part. **The party of the second part waives any claim for injury which may be done to the banks or gates of said canal by the cattle of the party of the first part.** If, during the irrigation of the lands of the party of the first part, it becomes necessary to close the said canal, then the said party of the first part shall permit to run to the said lands of the party of the second part a quantity of water approximately equal to the quantity of water belonging to the said party of the second part then running in said canal, provided that the same does not interfere with the drainage of the lands of the party of the first part at the close of such irrigation.

In case, after the construction of said canal, it is found that the same cannot properly be operated along the bottom of said depression, then the party of the second part shall be entitled to abandon the same and to construct a canal for the aforesaid purposes through the lands of the party of the first part over a route outside of the lands described in paragraphs four and nine of this agreement; and, in that event, the party of the first part will grant said party of the second part a right of way for the same upon similar conditions to those in this paragraph specified.

1601 9. Whenever there shall be sufficient water in said San Joaquin River to supply to said Blythe Canal 325 cubic feet of water per second, and after the land above described in paragraph four has been fully irrigated, the said party of the first part, subject to the provisions of paragraphs one, two, and three of this agreement, shall have the right to take water from said river through said canal, and use the same for the purpose of irrigating that certain other tract of land belonging to said party of the first part and described as follows:

All that portion of the lands of the party of the first part lying easterly of and adjoining the lands described in paragraph four of this agreement, and lying to the westerly of that certain line beginning at the center of the south line of section 24 in Township 10 South, Range 13 East, and running thence north to the center of section 13 in said township; thence northwesterly to the center

of section 11 in said township; thence north to the north line of section 35 in township 9 North, Range 13 East.

10. The said San Joaquin River, at said White House gauge, shall be measured at least once in each year by engineers selected respectively by the parties of the first, second and third parts, in order to establish a correct reading on said gauge for that year.

11. The said parties of the first, second, fourth and fifth parts agree to construct and complete, on or before the 31st day of October, 1903, a system of checks and levees on their respective lands in Township 11 South, Ranges 14, 15, 16, and 17 East, on the Fresno River, sufficient to properly utilize at all times all the waters of said river for the irrigation of said lands; and they hereby respectively agree to commence the construction of said system on their respective lands within the present year, and each to construct, as nearly as may be, one-third of his or its part of the same in each year until the same is completed.

The system so to be constructed on the lands of the parties of the second, fourth and fifth parts shall be such that all the surplus water used in irrigating said lands, and all the drainage from such irrigation, may be returned into the said Fresno River. The system so to be constructed on the lands of the said party of the first part shall

be such as, having due regard to expense of construction and
1602 economy of operation, will irrigate the said lands in the shortest time and with the least waste of water. The said party of the first part shall submit its proposed plan for such system to the party of the second part before beginning the construction of the same; and, if the said parties of the first and second parts shall differ as to whether or not such plan is reasonably adapted to accomplish the results aforesaid, that question shall be submitted to arbitration as follows: The said parties of the first and second parts shall each select a competent civil engineer, and the two engineers so selected may, if they do not agree, select a third engineer, and the decision of a majority of such engineers shall be binding and conclusive upon each of the parties hereto. Should the decision of such engineers be that the plan so proposed by the party of the first part is not adapted to secure the results aforesaid, then they shall themselves prepare a suitable plan for that purpose, which plan shall be followed by the said party of the first part in the construction of its said system. The compensation of such engineers shall be paid by the parties in such proportions as the arbitrators may determine.

From and after the completion of said system of checks and levees on the lands of the parties of the fourth and fifth parts, the said parties of the fourth and fifth parts shall have the right, in common as between themselves, to divert from the said Fresno River at all times such quantity of water, not exceeding 500 cubic feet per second, as shall be necessary to irrigate the following described lands, to-wit:

The south half of Section 1; all of sections 8, 9, 10, 11 and 12; the west half of the northwest quarter of section 13; all of sections 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35 and 36, in Township 11 South, Range 16 East; also all of sections

17, 19, and 20 in Township 11 South, Range 17 East, and all of section 18 in said township which lies north of the Fresno river.

Provided, however, that in irrigating said lands all of the surplus water used in such irrigation, and the drainage from such irrigation, shall be returned into the main channel of the Fresno River before said channel enters the lands of the party of the first part in Section 18, Township 11 South, Range 16 East.

12. Subject to the provisions of paragraph eleven of this agreement, the said party of the first part shall have the right, at all times from and after the completion of said system of checks and levees, to use the waters of the said Fresno River for the irrigation of the following described tract of land, to-wit:

In Township 11 South, Range 14 East; the south half of the southeast quarter of section 8; the south half of the south half of section 9; the south half of the south half of section 10; the south half of the south half of section 11; the south half of the south half of section 12; all of sections 13, 14, 15 and 16; the east half of section 17; the northeast quarter of section 20; the north half of section 21; the north half and the north half of the south half of section 22; the north half of section 23; and the north half of section 24; In Township 11 South, Range 15 East; the south half of Section 7; the south half and the south half of the north half of section 8; the south half and the south half of the north half of section 9; the south half of section 10; the south half of Section 11; the south half and the south half of the north half of section 12 and all of sections 13, 14, 15, 16, 17, 18, 19, 20 and 21; In Township 11 South, Range 16 East; the south half of section 7; and all of section 18.

13. Whenever in any one year, the lands described in paragraph twelve of this agreement shall have been completely irrigated, the said parties of the second, fourth and fifth parts shall thereafter have the right, in common as between themselves, to divert from the said Fresno River, at any point they may desire, any water flowing in said river, and to use the same for the irrigation of any lands they may desire; but until then they shall divert no water from the Fresno River through Cottonwood Creek, or otherwise above their lands described in paragraph eleven hereof.

14. From the date of this agreement, and pending the construction and completion of said system of checks and levees, the said parties of the first, second, fourth and fifth parts shall have the rights conferred upon them respectively by paragraphs eleven, twelve and thirteen of this agreement; provided, however, that during said period the said last described lands of the party of the first part shall be deemed to have been completely irrigated whenever the water shall reach that certain point on the south line of section eleven in Township 11 South, Range 15 East, where said line intersects the easterly bank of that certain slough which crosses said line a little to the westward of the center of the south line of said section.

15. If either or any of said parties of the first, second, fourth, and fifth parts, or any corporation controlled by them or either of them, shall hereafter become the owners of any portion of those certain lands in Township 11 South, Ranges 15 and 16 East, now

standing of record in the name of Susan A. Thornton, or of those certain lands in Township 11 South, Ranges 16 and 17 East, now standing of record in the name of Pedro Altube, which can be irrigated from the said Fresno River, returning all the surplus water and drainage back to said river, then the provisions of paragraphs eleven, twelve, thirteen and fourteen of this agreement shall apply to the lands so acquired.

16. If hereafter any person shall attempt to divert any water from either of said rivers to the prejudice of the parties hereto, the expense of the litigation caused thereby shall be ratably contributed by the parties hereto in proportion to the amounts of land severally irrigated by them from such river.

17. Each and every of the stipulations and agreements herein contained shall bind and inure to the benefit of the successors, heirs, and assigns of each and every of the parties hereto, in the same manner as if they had therein been expressly named.

In witness whereof the said parties of the first, second, and third parts have caused their respective corporate seals to be hereunto affixed, and these presents to be subscribed by their respective presidents and secretaries; and said parties of the fourth and fifth parts have hereunto set their hands and seals; all on the day and year first above written.

CALIFORNIA PASTORAL & AGRICULTURAL CO.,

By ISAAC BIRD, *President*.

[SEAL.]

R. H. MENZIES, *Secretary*.

MILLER & LUX.

By HENRY MILLER, *President*.

[SEAL.]

DAVID BROWN, *Secretary*.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION CO.,

By HENRY MILLER, *President*.

[SEAL.]

C. Z. MERRITT, *Secretary*.

HENRY MILLER,
THOS. B. BISHOP &
AZRO N. LEWIS.

Trustees of the Estate of Miranda W. Lux, Deceased.

HENRY LUX.

HENRY LUX, *Trustee*.

LENA LUX MACBRIDE.

LIZZIE LUX POTT.

MAGDALENA HOLTZSCHERER.

By Her Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

DOROTHEA ROTT.

By Her Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

HENRY ROEHRIG, SENIOR,

By His Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

HENRY ROEHRIG, JUNIOR,

By His Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

SALOME LUX WOLF,

By Her Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

CAROLINE LUX MICHEL,

By Her Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

GEORGE LUX,

By His Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

1606

EMIL LUX,

By His Attorney in Fact, ADOLPH ROSENTHAL,
Imperial German Consul General at San Francisco.

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this 8th day of June in the year One Thousand Nine Hundred and One, before me, John T. Williams, a Notary Public in and for the said City and County of San Francisco, State of California, residing therein, duly commissioned and sworn, personally appeared Thomas B. Bishop and Azro N. Lewis, trustees of the Estate of Miranda W. Lux, deceased, known to me to be the persons whose names are subscribed to, and who executed, the within instrument and they acknowledge that they executed the same as such trustees.

In witness whereof, I have hereunto set my hand and affixed my Official Seal at my office in said City and County of San Francisco, the day and year in this certificate first above written.

[NOTARIAL SEAL.]

JOHN T. WILLIAMS,

*Notary Public in and for the City and County
of San Francisco, State of California.*

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this fifth day of June, A. D. One Thousand Nine Hundred and One before me, Alfred A. Enquist, a Notary Public in and for the said City and County, duly commissioned and sworn, personally appeared Isaac Bird, President and R. H. Menzies, Secretary, known to me to be the President and Secretary of the California Pastoral & Agricultural Co., the corporation that executed the foregoing instrument, and acknowledged to me that such corporation executed the same.

1607 In witness whereof, I have hereunto set my hand and affixed my official Seal, the day and year in this certificate above written.

[NOTARIAL SEAL.]

ALFRED A. ENQUIST,

*Notary Public in and for the City and County
of San Francisco, State of California.*

For Corporation.

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On the Fifth day of June A. D. Nineteen Hundred and One, before me, James L. King, a Notary Public in and for said City and County, residing therein, duly commissioned and qualified, personally appeared Henry Miller, known to me to be the President, and David Brown, known to me to be the Secretary of Miller & Lux, the Corporation described in and that executed the annexed instrument, and they duly acknowledged to me that such Corporation executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal at my office in the City and County of San Francisco the day and year last above written.

[NOTARIAL SEAL.]

JAMES L. KING,

*Notary Public in and for the City and County
of San Francisco, State of California.*

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On the Fifth day of June, A. D. Nineteen Hundred and One, before me, James L. King, a Notary Public in and for said City and County, residing therein, duly commissioned and qualified, personally appeared Henry Miller, known to me to be the President, and C. Z. Merritt, known to me to be the Secretary of the San Joaquin and Kings River Canal and Irrigation Company, the corporation described in and that executed the annexed instrument, and they duly acknowledged to me that such Corporation executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal at my office in the City and County of San Francisco the day and year last above written.

[NOTARIAL SEAL.]

JAMES L. KING,

*Notary Public in and for the City and County
of San Francisco, State of California.*

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this fifth day of June A. D. 1901 Before me, James L. King, a Notary Public in and for said City and County, residing therein, duly commissioned and sworn, personally appeared Henry Miller known to me to be the person described in — whose name is subscribed to, and who executed the within instrument, and acknowledged to me that he executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, in the City and County of San Francisco, the day and year last above written.

[NOTARIAL SEAL.]

JAMES L. KING,

*Notary Public in and for the City and County
of San Francisco, State of California.*

STATE OF CALIFORNIA,

County of Santa Clara, ss:

On this 22nd day of June A. D. 1901, before me, Chas. E. Howes, a Notary Public in and for the said County of Santa Clara, residing therein, duly commissioned and sworn, personally appeared Adolph Rosenthal, known to me to be the person described in and whose name is subscribed to the within instrument as the Imperial German Consul General at San Francisco and as the Attorney-in-fact of Magdalena Holtzscherer, Dorothea Rott, Henry 1609 Roehrig, Senior, Henry Roehrig, Junior, Salome Lux Wolf, Caroline Lux Michel, George Lux and Emil Lux and the said Adolph Rosenthal acknowledged to me that he subscribed the names of Magdalena Holtzscherer, Dorothea Rott, Henry Roehrig, Senior, Henry Roehrig, Junior, Salome Lux Wolf, Caroline Lux Michel, George Lux and Emil Lux thereunto as principals, and his own name thereunto as attorney in fact of the aforesaid principals. In Witness Whereof I have hereunto set my hand and affixed my official seal at my office in the said County of Santa Clara the day and year first above written.

[NOTARIAL SEAL.]

CHAS. E. HOWES,

*Notary Public in and for Santa Clara County,**State of California.*

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On the Tenth day of June in the year One Thousand Nine Hundred and One (1901) before me, Eugene W. Levy, a Notary Public in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared Henry Lux known to me to be the person described in, whose name is subscribed to and who executed the annexed instrument, and acknowledged that he executed the same, individually and as Trustee.

In witness whereof, I have hereunto set my hand and affixed my official seal, at my office in the City and County of San Francisco, the day and year in this certificate first above written.

[NOTARIAL SEAL.]

EUGENE W. LEVY,

*Notary Public in and for the City and County
of San Francisco, State of California.*

Mills Building, Fifth Floor, Rooms 24 and 25, Telephone No. Main 5747.

1610 STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this Eleventh day of June in the year one thousand nine hundred and one, before me Oliver Dibble, a Notary Public in and for said San Francisco City and County, residing therein, duly commissioned and sworn, personally appeared Lena Lux MacBride, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

In witness whereof, I have hereunto set my hand and affixed my Official Seal, at my office in the City and County of San Francisco in the day and year in this Certificate first above written.

[NOTARIAL SEAL.]

OLIVER DIBBLE,

*Notary Public in and for the said San Francisco
City and County, State of California.*

STATE OF CALIFORNIA,

County of Santa Clara, ss:

On this 13th day of June, in the year one thousand nine hundred one before J. Hinman, a Notary Public in and for the said County of Santa Clara, State of California, residing therein, duly commissioned and sworn, personally appeared Lizzie Lux Pott known to me to be the person described in, whose name is subscribed to, and who executed the within instrument, and acknowledged to me that she executed the same.

Witness my hand and official seal, at my office in said County of Santa Clara, the day and year first above written.

[NOTARIAL SEAL.]

J. HINMAN,

*Notary Public in and for Santa Clara County,
State of California.*

(Endorsed:) Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 12. E. H. H. Master etc.

1612 COMPLAINANT'S EXHIBIT No. 13.

Statement of Cost of Construction of Canal and Works of San Joaquin & Kings River Canal & Irrigation Company to November 25, 1895.

Paid San Joaquin & Kings River Canal Company	
cost of works to date of purchase.....	\$119,335.29
" John Bensley et al. in stock (15,000 shares at \$7.50) for remainder of property of old Company	112,500.00
" by this Company for construction performed by itself from date of purchase from old Company to February 28, 1885.....	739,277.84
" by this company for construction from March 1, 1885, to November 25, 1895.....	84,685.51
Total	\$1,055,798.64

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Compl't's Exhibit No. 13. E. H. Heacock, Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1613

COMPLAINANT'S EXHIBIT No. 14.

Statement of Cost of Construction of San Joaquin Canal to December 31, 1873, and Betterments Since Constructed Therein to Nov. 25, 1907, with Cost of Construction of Parallels and Extensions. This Includes Only Items Actually Charged to Construction and Which Can Be Identified from the Accounts as Properly Belonging Thereto, and Does Not Include any Charges for Construction Which Cannot Be Positively so Identified from the Accounts Alone.

Paid S. J. & K. R. C. Co., cost of works to date of purchase		\$119,335.29
" John Bensley et al. in stock (15,000 shares at \$7.50) for water rights, &c.		112,500.00
Ledger A, 19. Cost of construction by this Company to Dec. 31, 1873, as per ledger account.	264,638.47	
Less work on "Upper Canal" as per Exhibit 7	9,026.23	
		255,612.24
Journal 126. Salary of M. L. Stangroom from Dec. 24, 1873, to Dec. 31, 1873..		100.00
" 127. Construction in 1873, as per Superintendent's report of January 16, 1874	19,775.19	
Less S. H. Mar- riner	45.15	
Travelling ex- penses	49.00	94.15
		19,681.04
" 131. Construction in 1873, as per Superintendent Stangroom's report of Jan. 31, 1874, item of J. E. Mason		98.15
" 135. Paid to Miller & Lux on construction up to Dec. 31, 1873, as per Superintendent Chandos' Report of Jan. 31, 1874		8,411.97
Ledger A, 200. Salary of M. L. Stangroom from Sept. 1, 1871, to Dec. 24, 1873, transferred from salary account..		8,720.00
Journal 619. Proportion charged to construction of expenses of Engineer's office..		5,000.00
Ledger B, 40. Telegraph account		10,258.16
Journal 404. Proportion of general Management account, transferred to construction account		10,485.12
		550,201.97

1614

Brought Forward		\$550,201.97
Ledger A, 246. Cost of Extension "A"		122,777.58
" " 251. " " " "B"		15,924.56
" B, 26. " " Las Garzas Waste Ditch....		1,800.00
" " 25. " " Parallel No. 1		9,852.27
" " 38. " " " " 2		26,053.34
" " 35. " " " " 3		11,220.96
Cost of Enlarging Parallel No. 1 as per Secretary's report of receipts and disbursements for year end- ing Nov. 25, 1885, and Presi- dent's and Superintendent's re- ports of December, 1885.....		13,525.58
Cost of Enlarging Main Canal as per above reports		15,816.76
Ledger A, 291.		
" B, 79. Balance of Wauchope Ditcher and Grader account, which should have been charged to construc- tion		6,505.04
Ledger " 15. Cost of Barn at Dam		245.60
" " " " " Firebaugh Stop & Waste Gate 1,480.74 440.63		
" " " " " Enlargement of 1889/90.		1,921.37
" " " " " Fences		20,527.48
		161.72
" " " " " New Structures.....		248.57
		1,808.53
		<hr/>
		\$798,429.61

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 14. E. H. H. Master Etc. Filed May 14, 1910 Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1615

COMPLAINANT'S EXHIBIT NO. 15.

Statement of Cost of Construction of San Joaquin Canal to December 31, 1873, and Betterments Since Constructed Therein to Nov. 25, 1907, with Cost of Construction of Parallels and Extensions. This Includes Only Items Actually Charged to Construction and Which Can Be Identified from the Accounts as Properly Belonging Thereto, and Does Not Include any Charges for Construction Which Cannot Be Positively so Identified from the Accounts Alone.

Paid S. J. & K. R. C. Co., cost of works to date of purchase	\$119,335.29
" John Bensley et al. in stock (15,000 shares at \$7.50) for water rights, etc.	112,500.00
Ledger A, 19. Cost of construction by this Company to Dec. 31, 1873, as per ledger account.	264,638.47
Less Work on "Upper Canal as per Exhibit 7	9,026.23
	<hr/> 255,612.24
Journal 126. Salary of M. L. Stangroom from Dec. 24, 1873, to Dec. 31, 1873. .	100.00
" 127. Construction in 1873, as per Superintendent's report of January 16, 1874	\$19,775.19
Less S. H. Mar-riner	45.15
Traveling ex-penses	49.00
	<hr/> 94.15
" 131. Construction in 1873, as per Superintendent Stangroom's report of Jan. 31, 1874, item of J. E. Mason	19,681.04
" 135. Paid to Miller & Laix on construction up to Dec. 31, 1873, as per Superintendent Chandos' report of Jan. 31, 1874.	98.15
Ledger A, 200. Salary of M. L. Stangroom from Sept. 1, 1871, to Dec. 24, 1873, transferred from Salary account. .	8,411.97
Journal 619. Proportion charged to construction of expenses of Engineer's office. .	8,720.00
Ledger B, 40. Telegraph account.	5,000.00
Journal 404. Proportion of general management account, transferred to construction account	10,258.16
	<hr/> 10,485.12
Carried Forward	<hr/> 550,201.97

1616

Brought Forward		\$550,201.97
Ledger A, 246. Cost of Extension "A"		122,777.58
" " 251. " " " "B"		15,924.56
" B, 26. " " Las Garzas Waste Ditch....		1,800.00
" " 25. " " Parallel No. 1		9,852.27
" " 38. " " " " 2		26,053.34
" " 35. " " " " 3		11,220.96
Cost of Enlarging Parallel No. 1 as per Secretary's report of receipts and disbursements for year end- ing Nov. 25, 1885, and President's and Superintendent's reports of December, 1885		13,525.58
Cost of Enlarging Main Canal as per above reports.....		15,816.76
Ledger A, 291.}		
" B, 79.}	Balance of Wauchope Ditcher and Grader account, which should have been charged to construction	6,505.04
Ledger " " 15. Cost of Barn at Dam		245.60
" " " " " Firebaugh Stop & Waste Gate 1,480.74		440.63
		1,921.37
" " " " " Enlargement of 1889/90..		20,527.48
" " " " " Fences		86.85
		161.72
		248.57
" " " " " New Structures		1,808.53
Carried Forward		798,429.61

1617

Brought Forward		798,429.61
L. B. 15. Central Paint Pipe Box of 1900.....	7	2,082.01
" " 332. Outside Canal 1896-8.....	2	437.74
" " 389. Dos Palos Colony Canal—inch extension of 1900	1	85,877.82
" " 395. San Joaquin River Weir, 1900-1 & 1903	3	280.71
" " 400. Dredge & Tenders	6	26,538.36
" " 401. Outside Canal Extension 1902-3.....	4	28,988.28
" " 432. Double Canal Syphon.....	8	10,475.09
" " 432. Outside Canal Stopgates 1904.....	5	63,415.21
" " 433. Measuring Boxes 1904.....	9	1,944.63
		230.17
		1,064.31
		1,019,763.97

Section Houses 1905:

Dos Palos	1,112.07	
Las Garzas	662.62	
Quinto	784.91	
		2,559.60

Crow Creek & Orestimba:

Ditches & Weirs	5,062.64	
Sundry Betterments	3,240.65	
Measuring Boxes 1905-7	12,313.19	
		1,042,940.05

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 15. E. H. H. Master. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1618 COMPLAINANT'S EXHIBIT No. 16.

Profit & Loss a/c San Joaquin & Kings River Canal & Irrigation Company, Incorporated, Year Ending June 30th, 1908.

Maintenance & General Administration:

Canal Cleaning	15,760.44
Damage Claims	192.28

Dredge Operating:

Expense	459.35	
Depreciation	850.00	
		1,309.35
Expense General	2,034.98	
" Automobile	1,343.29	
" S. F. Office	440.64	
Horses & Feed	3,548.02	
Household Furniture	233.48	
Instruments & Office Fixtures	143.40	
Labor	11,034.05	

Legal Expense:

Cal. P. & A. Co. v. M. & L.		
Canal Co.	1½	886.50
Miller & Lux et al. v. Stevin-son Cl.	3	6,911.10
Turner Estate v. East Side..		
Canal Co. et al v. Enterprise.	1½	5.53
" " " " v. Fresno F.		
& I. Co.	1½	1,309.05
Turner Estate v. Enterprise..	1½	274.25

Canal Co. v. Borland.....	1/2	571.86	
Eastwood & North Fork Agreements	3/4	3,378.38	
Stevinson v. Canal Co.		350.00	
Water Rate <i>Contract</i>		4,064.80	
<i>Contract</i> suits against debtors, recorders' fees, reporting, etc.		656.07	
			18,407.54
Lumber & Piles		822.08	
Rent, S. G. Office.....		900.00	
Firebaugh Weir		1,537.57	
Irrecoverable accounts		378.29	
Repairs to Headworks		1,574.86	
Repainting Section Houses		597.20	
Resurveying and Mapping		2,373.49	
Salaries		6,929.49	
Subsistence		4,276.22	
San Luis Outside Waste Gate.....		407.41	
Taxes		8,319.44	
Telephone Maintenance		282.17	
Tools & Machinery		21.93	
Vehicles & Harness		571.16	
Wood		148.50	
Profits:			
Interest & Discount			163.48
Rent			751.50
Water			108,324.16
Total Profit for Year.....		25,751.86	
			109,239.14
			109,239.14

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al., Compl't's Exhibit No. 16. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1619 COMPLAINANT'S EXHIBIT No. 18.

This agreement, made and entered into this 20th day of October, 1908, by and between The California Pastoral and Agricultural Company, Limited, a corporation organized under the laws of the Kingdom of Great Britain and Ireland, party of the first part, Miller & Lux, Incorporated, a corporation organized under the laws of the State of Nevada, the party of the second part, The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, a corporation organized under the laws of the State of Nevada, party of the third part, and Borland Land Company, a corporation organized

under the laws of the State of California, the party of the fourth part, Witnesseth:

Whereas, the party of the fourth part is the owner and in possession of all those certain lots, pieces and parcels of land situate, lying and being in the County of Fresno, State of California, and bounded and more particularly described as follows, to-wit:

All of Section Twenty Five (25) in Township Fourteen (14) South, Range Fourteen (14) East, Mount Diablo Base and Meridian; all of Sections Twenty-one (21), Twenty-six (26), Twenty-seven (27), Twenty-eight (28), Twenty-nine (29), Thirty (30), Thirty-one (31), Thirty-Two (32), Thirty-three (33), Thirty-four (34) and Thirty-five (35), and the Northwest quarter of Section Thirty-six (36), and all those portions of Sections Twenty-two (22), Twenty-three (23) and Twenty-four (24), lying South and West of Fresno and Kings River Slough, and all that portion of Section Twenty-five (25) lying South and West of said Fresno or Kings River Slough and North and West of Mud Slough, all in Township Fourteen (14) South, Range Fifteen (15) East, Mount
1620 Diablo Base and Meridian; all of Section Ten (10); the

South half, South half of Northwest quarter, the Northeast quarter of Northwest quarter and Southwest quarter of Northeast quarter of Section Fourteen (14); Southwest quarter, South half of Northwest quarter, Northwest quarter of Northwest quarter, South half of Northwest quarter, Northwest quarter of Northwest quarter, South half of Southeast quarter, and Northwest quarter of Southeast quarter of Section Twenty-four (24), all in Township Fifteen (15) South, Range Fifteen (15) East, Mount Diablo Base and Meridian; and all of Sections Fourteen (14) and Twenty Four (24) in Township Sixteen (16) South, Range Sixteen (16) East, Mount Diablo Base and Meridian, and

Whereas, the party of the fourth part and its predecessors in interest have heretofore pumped from Fresno Slough waters of the San Joaquin River therein found, and have used the waters so pumped for the irrigation of the lands hereinbefore described and the party of the fourth part claims the right so to pump and use such water, and claims to have acquired the right to divert from said slough at least sixty cubic feet of water of the San Joaquin River flowing in said slough per second, and

Whereas, the party of the first part is, and for many years has been the owner of certain lands riparian to, and bordering upon the San Joaquin River below the point where the said Fresno Slough and the main channel of the said San Joaquin River connect, and as such owner of such riparian lands has denied and denies the right of the party of the fourth part to pump or otherwise use the waters of said San Joaquin River flowing in said slough, and has instituted and is now maintaining in the Circuit Court of the United States
for the Southern District of California, Northern Division, a
1621 suit in equity against Agnes Borland, as Executrix of the last will and testament of Archibald Borland, deceased, and others, the predecessors in interest of the party of the fourth part

to enjoin them from so pumping or using said waters, which suit is still pending and undetermined, and

Whereas, the party of the second part is, and it and its predecessors in interest for many years have been the owners of certain lands riparian to and bordering upon the San Joaquin River below the point where the said Fresno Slough and the main channel of the said San Joaquin River connect, and as such owner of such riparian land has denied and denies the right of the party of the fourth part to pump or otherwise use the waters of said San Joaquin River flowing in said slough, and

Whereas, The party of the third part is, and for many years past it and its predecessors in interest have been the owners of a certain canal taking water from the San Joaquin River below the point where the said Fresno Slough and the main channel of the said San Joaquin River connect, and it and its predecessors in interest have been the owners of the right to divert water from the said river into the said canal, and use the same, and as such owner of such canal, and water right has denied and denies the right of the party of the fourth part to pump, or otherwise use the waters of said San Joaquin River flowing in said slough, and

Whereas, there is now pending in the Superior Court of the County of Fresno, State of California, an action brought by the parties of the second and third parts against the predecessors in interest of the party of the fourth part to enjoin them from so pumping, or using said waters, which suit is still pending and undetermined, and

1622 Whereas, the predecessors in interest of the parties of the first, second and third part hereto respectively in the lands and water rights hereinbefore referred to have heretofore, and under date of the 17th day of August, 1898, and under date of the 4th day of June, 1901, entered into two certain agreements in writing relating to the respective rights of the said parties to divert, and use the waters of the San Joaquin River, and other matters, and

Whereas, the parties hereto are desirous of adjusting and settling the controversies between the parties of the first, second and third part on the one hand, and the party of the fourth part on the other hand, in respect to the diversion and use by the party of the fourth part on the lands of the party of the fourth part hereinbefore described of the waters of the said San Joaquin River flowing in said Fresno Slough;

Now therefore, in consideration of the premises, and of the conditions and covenants of this agreement, the parties hereto agree as follows, to-wit:

1. It is understood that the agreement of each party hereto is the consideration for all of the agreements of each of the other parties, and each party hereto shall be permitted to avail itself of all of the provisions of this agreement as against each of the other parties.

2. The party of the fourth part, subject to all of the provisions of this agreement, and whenever there is flowing in the San Joaquin River at the head of Lone Willow Slough on or near Section Twenty-five (25), Township Thirteen (13) South, Range Fifteen (15) East,

Mount Diablo Base and Meridian, twenty-five hundred (2500) cubic feet of water per second, or any amount of water in excess thereof, shall be permitted so far as the parties of the first, second and 1623 third part- hereto are concerned to divert from said Fresno

Slough, and the waters then therein found, sufficient water of the San Joaquin River flowing therein to irrigate the lands herein-before described, for the watering of stock and for domestic use thereon, and to use the same for said purposes but for no other purpose, and the parties of the first, second and third part- hereto agree that they will not, and that no one of them will interfere with such diversion, or use of said water, or seek to prevent, enjoin or restrain the same.

3. The diversion or use of the waters of the San Joaquin River by any one of the parties of the first, second and third part- at any point on the said river shall not be construed as a prevention or interference by such party with the diversion or use by the party of the fourth part of the waters of the San Joaquin River flowing in said Fresno Slough as permitted in the preceding paragraph.

4. It is understood that the parties of the first, second and third part- hereto do not hereby grant, or secure to the said party of the fourth part any right so to divert or use the said waters and do not agree to protect the party of the fourth part in the enjoyment thereof, nor shall any of the parties hereto ever assert or claim either against any of the parties hereto, or as against any other person using or claiming the right to use the waters of the said river, that the party of the fourth part has succeeded to or acquired any of the rights of the parties of the first, second or third part, or any of them, in or to the waters of the said river. It is understood that the parties of the first, second and third part- retain, and each of them retains unimpaired by this agreement, their respective rights in and to the waters of the said river, and may at all times assert and enjoy

1624 the said rights, subject only as regards the party of the fourth part hereto to the agreement herein contained not to interfere with the diversion, and use by the party of the fourth part of the waters of the San Joaquin River found in the said Fresno Slough in the manner, and at the times herein provided for.

5. The party of the fourth part agrees that it will not, unless by virtue of some right hereafter acquired and not now existing, divert any of the waters of the San Joaquin River at any time found in the said Fresno Slough except as in Clause 2 hereof expressly permitted, and that it will not, unless by virtue of some right hereafter acquired and not now existing, at any time divert at any point any of the waters of the San Joaquin River or any waters found or flowing in the bed or channel of the San Joaquin River except as such diversion may result as a necessary consequence from the diversion of the waters of the said San Joaquin River in the said Fresno Slough as in clause 2 hereof expressly permitted; and that it will not hereafter, as against any of the parties hereto, claim, assert or exercise any right in the waters of the San Joaquin River whether found in the said Fresno Slough or elsewhere based on its ownership of the said lands, or on any use of the said waters

on the said lands heretofore made by it or its predecessors in interest except as provided in this agreement, and all its rights in the said waters as against any of the parties hereto shall be based on this agreement and on this agreement alone.

6. It is agreed and understood that the remedy at law in damages for a breach by the party of the fourth part of clause 5 of this agreement, or of any covenant therein contained would be inadequate, and that compliance by the party of the fourth part with all the covenants of the said clause may be enforced by injunction.

1625 7. By "the waters of the San Joaquin River in Fresno Slough" as referred to in this agreement is meant the water which has flowed into said slough from the main channel of the San Joaquin River and this agreement shall not affect any rights which the party of the fourth part may have to the water flowing in said slough from Kings River and other streams to the south.

8. This agreement shall be binding upon and inure to the benefit of the successors in interest of the respective parties hereto.

9. Upon the execution of this agreement the suits hereinbefore mentioned shall be dismissed without cost to any party hereto.

10. The party of the fourth part hereby transfers, conveys and sets over unto the San Joaquin & Kings River Canal & Irrigation Company incorporated, the party of the third part, any right which at the time of the execution of this agreement the party of the fourth part may have to divert the water of the San Joaquin River flowing in Fresno Slough at all times when there is less water flowing in said San Joaquin River than twenty-five hundred (2500) cubic feet per second at the head of Lone Willow Slough above mentioned, and the said party of the third part may so far as the fourth party is concerned change the point of diversion, or the manner of diversion of said water and may divert the same at any point upon the San Joaquin River and in any manner it desires.

11. The said party of the third part agrees to furnish to the party of the fourth part, without charge, sufficient water to irrigate said lands at any time the said party of the fourth part desires to irrigate the same, when it is unable to otherwise irrigate the same under the

1626 provisions of this agreement, and when the third party has water not required by other consumers, and at all other times, at the regular rate fixed by the party of the third part or by

law for furnishing water to the inhabitants of the County of Fresno, but the third party shall not be required to pay any of the expense of conveying the water to said land.

12. The said party of the third part agrees with the parties of the first and second parts that it shall not be deemed to have acquired any rights in the waters of said River, or any right to divert the same by virtue of anything contained in, or granted to it by, this agreement, in addition to the rights heretofore recognized by the provisions of the aforesaid agreements of August 17th, 1898, and June 4th, 1901, and the said last mentioned agreements shall hereafter as heretofore determine and be the measure of the rights of the party of the third part in the waters of the said river as against the parties of the first and second parts.

13. It is understood that the party of the fourth part does not intend by these presents to convey to the said party of the third part any right acquired by the party of the fourth part to divert said water when there is more than twenty-five hundred cubic feet of water in said river at Lone Willow Slough above referred to, and if at any time it should be held that said party of the fourth part has no right to divide its appropriation and to convey to the party of the third part a part thereof, as above provided, this shall in no way affect the right of the party of the fourth part to divert said water as in this agreement provided when there is more than twenty-five hundred cubic feet per second flowing in said river as aforesaid.

In witness Whereof, the parties hereto have caused these presents to be executed in quadruplicate the day and year first hereinabove written.

1627 THE CALIFORNIA PASTORAL AND AGRICULTURAL COMPANY, LIMITED,

[SEAL.] By ISAAC BIRD,

Its Attorney in Fact.

MILLER & LUX, INCORPORATED,

[SEAL.] By J. LEROY NICKEL,

Vice President.

By DAVID BROWN, *Secretary.*

THE SAN JOAQUIN AND KINGS RIVER CANAL AND IRRIGATION COMPANY, INCORPORATED,

[SEAL.] By J. LEROY NICKEL,

Vice President.

[SEAL.] By C. Z. MERRITT, *Secretary.*

BORLAND LAND COMPANY,

[SEAL.] By W. S. MITCHELL, *President*

[SEAL.] By HUGH T. GOWER, *Secretary.*

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this twenty-first day of October, in the year one thousand nine hundred and eight, before me, James Mason, a Notary Public in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared J. Leroy Nickel and David Brown, known to me to be the Vice-President and Secretary respectively of Miller and Lux, Incorporated, one of the corporations described in and that executed the within instrument, and also known to me to be the persons who executed it on behalf of the Corporation therein named, and they acknowledged to me that such Corporation executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal, at my office, in the City and County of San Francisco, the day and year in this Certificate first above written.

[SEAL.]

JAMES MASON,

Notary Public in and for the City and County of San Francisco, State of California.

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this twenty-first day of October, in the year one thousand nine hundred and eight, before me, James Mason, a Notary Public in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared W. S. Mitchell and Hugh T. Gower known to me to be the President and Secretary respectively of Borland Land Company, one of the Corporations described in and that executed the within instrument, and also known to me to be the persons who executed it on behalf of the Corporation therein named, and they acknowledged to me that such Corporation executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal, at my office, in the City and County of San Francisco, the day and year in this Certificate first above written.

[SEAL.]

JAMES MASON,

Notary Public in and for the City and County of San Francisco, State of California.

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

On this twenty-first day of October, in the year one thousand nine hundred and eight, before me, James Mason, a Notary Public in and for the said City and County, residing therein, duly commissioned and sworn, personally appeared J. Leroy Nickel and C. Z. Merritt, known to me to be the Vice-President and Secretary respectively of The San Joaquin and Kings River Canal and Irrigation Company, incorporated, one of the Corporations described in and that executed the within instrument, and also known to me to be the persons who executed it on behalf of the Corporation therein named, and they acknowledged to me that such Corporation executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal, at my office, in the City and County of San Francisco, the day and year in this Certificate first above written.

[SEAL.]

JAMES MASON,

Notary Public in and for the City and County of San Francisco, State of California.

(Endorsed:) Agreement Between The California Pastoral & Agricultural Company, Limited, et al. and Borland Land Company, Dated October 20, 1908. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl'ts Exhibit No. 18. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1630 COMPL'T'S EXHIBIT 17 FOR IDENTIFICATION.

Inventory of S. J. & K. R. C. & I. Co., Inc., November 15th, 1907.

122 Telephone Expense	176.86
54 Auto Expense	657.40
63 Instruments & Office Furniture	346.
55 Horses & Feed	703.15
87 Lumber & Piles	832.69
162 Wood account	96.
163 Vehicles & Harness	2,419.35
50 General Expense	601.70
60 Household Furniture	849.15
113 Subsistence	728.94
129 Tools & Machinery	1,519.60
	<hr/>
	8,930.84

1631 *Inventory of S. J. & K. R. C. & I. Co., Inc., November 15, '07.*

Telephone Expense.

1 Coil Wire 100 lb. @ .04¢	4.
12 Phones (Standard) @ 8.50	102.
8 " old @ 4.00	32.
60 " Brackets @ 7¢	4.20
2 " Climbers @ 2.50	5.00
2 " Poles 6/6 24 144 @ 35.	5.04
15 lb. " Wire @. 04 .....	.60
2 Wire stretchers & Pullers @ 2.50	5.00
1 Phone instrument desk 13.50	13.50
12 " Cords @ 40¢	4.80
3 dz. Porcelain Insulators @ 2¢ .....	.72
	<hr/>
	146.86

Auto Expense.

1 Auto	600.
2 Extra Tires	45.
20 Gals. Lubricating Oil	11.
5 " Oil	1.40
	<hr/>
	657.40

Instruments and Office Furniture.

1 Safe	20.
1 Transit	50.
2 Levels	100.
4 Rain Gauges	10.
1 Rod	5.
2 Chains 1—5.00 1—7.50	12.50
2 Current Meters	120.

1 Revolvers	10.
1 Ammeter	7.50
1 Steel Tape.....	10.
1 Stop Watch	1.00

346.00

1632

Horses & Feed.

28 Curry Combs .....	.25	7.
28 Horse Brushes .....	.30	8.40
6 Water Buckets .....	.50	3.
43 Tons Hay	8.00	344.
62 Sax R. Barley 5200 lb. @	1.55	80.60
3 Horses	75.00	225.00
40 " Shoes .....	.03 1/2	1.40
5 Stable Brooms .....	.75	3.75
60 lanterns .....	.50	30.00

703.15

Lumber & Piles.

4 Posts, 25	1.
55 Half Posts, 16.....	8.80
7 Piles 26 182 lineal feet @ 25¢ ft.....	45.50
Assorted R W 14,889 feet @ 35.00.....	626.12
Assorted P 5818 feet @ 26.00.....	151.27

832.69

Wood a/c.

32 Cords Wood @ 3.00.....	96.
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1633

Vehicles & Harness.

26 Road Carts	22.00	572.
1 Pole Cart	25.00	25.
2 Top Buggies with pole.....	110.00	220.
1 Spring Wagon	25.00	25.
2 Oil Wagons	150.00	300.
1 2 hrs. Wagon.....	85.00	85.
1 Heavy Wagon	90.00	90.
1 Dump Cart	35.00	35.
25 sets single Harness.....	12.00	300.
6 1/2 " double "	18.00	117.
2 " chain "	18.00	36.
1 " spring wagon harness.....	25.00	25.
2 " double buggy "	30.00	60.
1 " dump cart "	14.00	14.
2 " Double lines	2.50	5.
51 Halters .....	.75	38.25
9 Tie Ropes .....	.15	1.35
21 Horse collars	2.00	42.
5 Kicking straps	1.25	6.25

7 Breast plates	2.10	14.70
2 Bridles	1.50	3.
2 Saddles 1—35.00 1—20.00	...	55.
1 Fly net	5.00	5.
1 Saddle blanket	1.00	1.
2 Horse "	.75	1.50
17 whips	1.25	21.25
28 5 lb. chains	1.50	42.
9 Single trees	.30	2.70
7 Double trees	3.25	22.75
15 pr. Lead Bars	2.00	30.
3 Neck Yokes	.75	2.25
2 Harness punches	.50	1.
5 Cart cushions	1.50	7.50
1 Hay Rack	...	15.
1 set Seat Springs	2.00	2.
3 Clevises	.15	.45
4 Bow sockets	.30	1.20
2 pails Axle grease	.75	1.50
3 Heavy Robes	3.00	9.
1 Light "	.70	.70
3 Header trucks	60.00	180.
1 sled	2.00	2.
1 Wagon Jack	1.00	1.

2419.35

1634

General Expense.

27 pairs Gum Boots	4.00	108.
8 Water troughs	10.00	80.
5 gals. sq. poison	1.50	7.50
1 " Ascetic acid	1.50	1.50
1 Coal Oil can	.50¢	.50
2 Gals. gasoline	.25¢	.50
100 ft. Clothes line	.75¢	.75
19 doz. " pins	.05	.95
3 only " Wringers	2.25	6.75
1 " " Basket	.45	.45
2 Soap dishes	.15	.30
11 Wash Basins	.20	2.20
16 " Tubs	.60	9.60
8 " Boilers	1.25	10.
6 " Boards	.25	1.50
1 " Machine	4.00	4.
10 Brooms	.25	2.50
3 Mops	.30	.90
32 Cords Food. See Wood a/c.		
2 pcs. 18" Sewer pipe	1.25	2.50
11 Tressels. See Tools & Mac.		
485 old sacks	.04	19.40
2 Canal Chains	75.00	150.
16 Single blocks	1.00	16.

60 lbs. $\frac{3}{4}$ " Rope.....	.15¢	9.
1 sk. Cement.....	.75¢	.75
$\frac{3}{4}$ bbl. Lime.....	1.50	1.15
950 lb. Wire Nails.....	.04¢	38.00
250 lb. Spikes.....	.04	10.00
2 Mty. Barrels.....	2.00	4.
1 Sprinkling pot.....	.75	.75
50' Rubber Hose.....	5.50	5.50
1 Nozzle.....	.50	.50
2 Row boats.....	10.00	20.
1 Sml. Barge.....	18.00	18.
6 oars.....	.50	3.
2 Buckets.....	.50	1.
40' $\frac{1}{2}$ " Wire Rope.....	.20	8.
3 Step ladders.....	.75	2.25
1 Grip.....	4.00	4.
1 Drag Chain.....	50.00	50.

601.70

1635

Household Furniture.

10 Kitchen Tables.....	3.75	37.50
32 Lamps.....	1.00	32.
48 Chairs, Small.....	1.00	75.
9 " Rockers.....	1.50	13.50
9 Bureaus.....	3.50	31.50
10 Wash Stands.....	1.50	15.
6 Dressers.....	3.50	21.
6 Double bedsteads.....	4.00	24.
3 " " Iron.....	4.00	12.
18 Single ".....	2.00	36.
7 " Cots.....	2.00	14.
1 Folding Bed.....	10.00	10.
18 Mattresses.....	2.50	45.
10 " Spring.....	2.50	25.
26 Comforters.....	1.25	32.50
14 Single Blankets.....	1.00	14.00
44 Sheets.....	.60	26.40
65 Pillow slips.....	.15	9.75
24 Pillows.....	1.00	24.
14 Bed Spreads.....	2.00	28.
6 single mattresses.....	2.00	12.
13 Alarm Clocks.....	.45	9.75
1 8 day ".....	2.00	2.00
7 Desks 6 @ 2.50 1 @.....	22.50	37.50
12 Dining Tables.....	2.00	24.00
9 Table cloths.....	1.00	9.
8 Bureau Scarfs.....	.50	4.
14 napkins.....	....	2.
4 center tables.....	1.00	4.
2 Cupboards.....	5.50	11.
37 Window Shades.....	.40	14.80

16 pr. Lace Curtains.....	1.50	24.
1 Sash ".....	1.50	1.50
8 Curtain Rods .....	.30	2.40
38 Towels .....	.25	9.50
3 Wash Bowls & Pitchers.....	2.00	6.00
6 carpets		20.00
Matting for 7 rooms @	1.00	7.00
4 Large rugs	5.00	20.
9 small "	1.50	13.50
10 Heating stoves	6.00	60.
8 Sad irons .....	.25	2.
3 Feather dusters	2.00	6.
3 dust pans .....	.35	1.05
3 mirrors .....	.25	.75
1 Comb & Brush.....	.75	.75
1 Couch	15.00	15.00
1 Waste Basket .....	.50	.50

849.15

1636

Subsistence.

6 Egg Beaters .....	.15	.90
4 Graters .....	.05	.20
9 Soup Ladles .....	.20	1.80
11 Strainers .....	.10	1.10
10 Dippers .....	.05	.50
25 Tin Cups .....	.07	1.75
4 Milk Skimmers .....	.15	.60
60 " Pans .....	.15	9.00
8 " Pails .....	.50	4.00
2 " Strainers .....	.25	.50
105 Table Knives .....	.03	3.15
127 " Forks .....	.02	2.54
86 " Spoons .....	.06	5.16
101 Tea Spoons .....	.05	5.05
17 Butcher Knives .....	.25	4.25
8 Mixing Spoons .....	.05	.40
2 Large Forks .....	.05	.10
2 Chopping Knives .....	.15	.30
9 " Bowls .....	.40	3.60
22 Pie Plates .....	.05	1.10
19 Platters .....	.25	4.75
48 Vegetable dishes .....	.20	9.60
38 Soup plates .....	.12	4.56
141 Dinner plates .....	.10	14.10
143 Cups .....	.06	8.58
92 Saucers .....	.06	5.52
12 large pitchers .....	.40	4.80
6 Cream " .....	.25	1.50
14 syrup " .....	.30	5.20
13 sugar bowls .....	.30	3.90

24	mush bowls	.10	2.40
4	gravy "	.25	1.
1	Cake dish	1.00	1.
16	sauce "	.06	.96
15	des-ert "	.30	4.50
11	Individual butter dishes	.07	.77
5	Butter dishes	.25	1.25
8	Pepper shakers	.10	.80
7	salt "	.10	.70
4	spoon holders	.20	.80
3	Basins	.15	.45
81	Jelly glasses	.05	4.05
25	glasses	.05	1.25
11	Tea pots	.40	4.40
14	coffee "	.40	5.60
6	" Mills	.45	2.70
12	Tea kettles	.60	7.20

Forward 151.34

1637 Subsistence—(Continued).

Brt. Forward		151.34	
9	Hot cake turners	.50	4.50
7	griddles	.50	3.50
3	muffen pans	.50	1.50
1	skillet	.50	.50
5	small pans	.40	2.
3	baking "	1.25	3.75
13	dish "	.60	7.80
25	bread "	.15	3.75
27	fry "	.50	13.50
40	stew pots	.50	20.
7	cleavers	.75	5.25
152	Fruit cans	.05	7.60
63	Mason jars	.75 doz.	3.95
5	stone "	.25	1.25
10	Cook stoves 1-25 3-15 4-10 2-4	....	118.
1	" " Oil	8.50	8.50
17	water buckets	.50	8.50
2	" coolers	4.50	9.00
1	Ice Cream Freezer	2.50	2.50
10	Kitchen Tables. See Household Furniture.		
2	Flour Sieves	.25	.50
7	large kettles	.50	3.50
4	steels	.70	2.80
2	Stove shovels	.15	.30
6	spud mashers	.15	.90
9	meat saws	.75	6.75
10	" safes	2.50	25.
5	churns	1.00	5.

2	Rolling pins	.25	.50
2	1 gal. Demijohns.	.40	.80
16	cans Tomatoes	.10	1.60
207	qts. Fruit	.20¢	41.40
358	Chickens	.40	143.20
1	Cow	35.00	35.
2	Calves	10.00	20.
	Provisions	...	65.

728.94

1638	Tools & Machinery.		
33	Pike poles	1.00	33.
61	shovels	.75	45.75
4	Spades	.75	3.
14	Picks	.45	6.30
6	Rakes	.50	3.
19	Mattocks	1.25	23.75
2	Adze	.70	1.40
4	Hoes	.40	1.60
2	Brush Hooks	.60	1.20
1	Weed Fork	1.10	1.10
10	Grub Hoes	.90	9.
40	Pitch Forks	.90	36.
5	Hoe down forks	1.00	5.
14	Crow bars	.50	7.
3	6' Crosscut saws	.75	2.25
9	4½' " "	.50	4.50
30	Axes	.90	27.
10	Hatchets	.75	7.50
2	Pile drivers lge.}		
1	" " sml.}		300.00
8	Douglas pump	3.50	28.
1	Centrifugal pump 12" M. & L.		
17	Slip Scrapers	7.50	127.50
2	Shush " "	7.50	15.
2	Wheel " "	40.00	80.
3	4 horse " "	15.00	45.
3	Single plows	7.50	22.50
1	Hay Rake	...	22.50
1	Set Harrows	...	10.
2	Mowing machines	55.00	110.00
2	Header gears		
1	" truck	See Vehicles & Harness.	
1	Sled		
1	Wagon Jack.	See V. & H.	
3	Grind stones	3.75	11.25
8	scythes	1.00	8.
2	120 lb. Anvils	10.00	20.
2	Blacksmith vise	3.50	7.
1	" blower & Forge	...	22.50
1	" Hammer	.75	.75

1124 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

19 pr. Tongs .....	.60	11.40
6 10-lb. sledge hammers.....	1.00	6.
7 wedges .....	.75	5.25
2 drills	40.00	140.
5 " bits .....	.50¢	2.50
1 Hardy .....	.20	.20

Forward 1223.70

1639 Tools & Machinery—(Continued).

Brought Forward 1223.70

21 Monkey Wrenches .....	.40	8.40
3 S " .....	.15	.45
1 Pipe "	1.00	1.
1 " Vise	1.50	1.50
1 " Cutter	1.00	1.
2 sets Caps & Dies.....	10.00	20.
1 Tap Holder .....	.25	.25
1 Brazing torch	3.00	3.
1 Soldering Iron .....	.50	.50
5 Buck saws .....	.75	3.45
14 Hand " .....	.80	11.20
1 Saw horse .....	.25	.25
1 " set .....	.75	.75
2 " vise .....	.75	1.50
10 Braces .....	.75	7.50
26 Bitts .....	.15	3.90
5 Augers .....	.50	2.50
4 Squares .....	.65	2.60
11 Hammers .....	.50	5.50
1 pr. pincers	1.00	1.
9 Files .....	.10	.90
2 Rasps .....	.10	.20
2 Planes .....	.50	1.
9 punches .....	.20	1.80
1 Cold chisel .....	.15	.15
1 set "	1.50	1.50
7 odd " .....	.25	1.75
1 Draw Knife .....	.60	.60
1 Borax spoon .....	.20	.20
1 Oil Can .....	.15	.15
3 gals. Castor Mac. Oil.....	.35¢	1.05
1 Lawn Mower	6.00	6.
10 Wheel Barrows	3.00	30.
3 Sheep shears .....	.90	2.70
3 Mauls .....	.60	1.80
2 Branding Irons	1.00	2.
5 Axe Handles .....	.20	1.
3 Fork " .....	.35	1.05

THE COUNTY OF STANISLAUS, ETC., ET AL.

1125

1	Windlass	10.00	10.
11	Trussels .....	.50	5.50
1	4 H. P. Gas Engine Pump.....	.....	150.
			<hr/> 1519.60

Endorsed: Inventory S. J. & K. R. C. & I. Co. Nov. 15, 1907. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Compl't's Exhibit No. 17 for Identification. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

COMPL'T'S EXHIBIT No. 20.

1640

Statement of Number of Acres Irrigated from Canals of S. J. & K. R. C. & I. Co. from 1897 to 1908, Inclusive.

Year.	Main canal. Fresno.	Main canal. Merced.	Main canal. Stanislaus.	Dos Palos canal. Fresno.	Dos Palos canal. Merced.	Outside canal. Fresno.	Outside canal. Merced.	Total.
1897.....	9,250	15,003	6,401	3,255	3,241	3,122	.....	40,272
1898.....	5,694	23,557	10,034	4,440	3,151	2,250	11,285	60,411
1899.....	10,855	21,528	11,007	4,662	5,463	3,007	8,662	65,184
1900.....	11,215	20,129	9,750	4,052	4,060	3,132	8,145	60,483
1901.....	10,033	17,125	7,948	3,473	3,062	5,067	3,583	50,291
1902.....	10,443	17,502	9,772	3,922	4,939	4,292	4,096	54,966
1903.....	13,282	20,490	7,051	4,276	4,884	4,742	5,483	60,208
1904.....	24,361	26,944	11,284	5,431	5,002	8,104	11,723	92,849
1905.....	26,392	33,662	11,673	5,279	5,838	8,257	12,879	103,980
1906.....	20,147	32,311	11,858	5,250	6,168	8,305	10,410	94,449
1907.....	11,453	22,324	11,729	5,598	9,813	3,792	9,933	74,642

1908.....	17,023	22,290	11,637	3,799	7,588	5,544	12,628	80,509
	170,148	272,865	120,144	53,437	63,209	59,614	98,827	838,244
Average per year.....	14,179	22,739	10,012	4,453	5,267	4,968	8,984	70,602

Endorsed: No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Compl't's Exhibit No. 20. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1641 COMPL'T'S EXHIBIT NO. 21.

Comparison of the Estimated Costs Between the Two Reports on the Canal and Works of the San Joaquin and Kings River Canal and Irrigation Company, as Made by R. H. Goodwin on June 9th, 1896, for the County of Stanislaus and on December 24th, 1906, for the Above-mentioned Company.

Estimated Cost, in Report 1906.....	\$996,312.63
“ “ “ “ 1896.....	312,358.00

Difference between the two reports..... \$683,954.63

1642 *Comparison of Prices, Material, Labor, etc.*

Lumber.

Lumber f. o. b. Steamer at Long Wharf S. P. R. R. Co. at Oakland, Cal.

	Report of 1896.	Report of 1907.
Redwood planking, per M ft. B. M.....	\$13	\$27
“ timber “ “ “	14	27
Pine “ “ “ “ “	11	27
Piles round, per running foot.....	13¢	25¢

Carpenter Work.

	Report of 1896.	Report of 1907.
Carpenter Work on bridges—per M ft. B. M.....	\$5	\$5
“ “ “ small gates “ “ “	5	10
“ “ “ Regulating or stopgates “ “ “	7	10

Earth Work.

	Report of 1896.	Report of 1907.
Excavation per cubic yard.....	6½¢	
“ dredging “ “	5¢
“ 25 to 40 foot canals “ “	10¢
“ 20 foot canals “ “	8¢
“ 10 foot canals “ “	7¢

Freight on Lumber—S. P. R. R. Co.

Station—	Report of 1896.		Report of 1906.	
	Per M ft. B. M.	}	Per M ft. B. M.	{ Ton.
Crows Landing.....	\$5.15		\$4.35	\$2.90
" Newman	5.45		4.65	3.10
" Ingomar	6.05		5.25	3.50
" Volta	6.35		5.55	3.70
" Los Banos	6.50		5.70	3.80
" Dos Palos	6.86		5.70	3.80
" Firebaugh	7.15		5.70	3.80
" Mendota	7.30		5.70	3.80

1643

Comparison of Earthwork and Lumber in Place.

Earthwork.

Excavation—Main Canal, Parallel Canal, Extension "A" and Extension "B" Canals:

			Report of 1896.	Report of 1906.	Report of 1906. New work.
As per Report 1896—2,966,125 cubic yards	@	61½¢	\$192,798.00		
" " 1896 2,966,125	@	10¢		\$296,612.50	\$18,937.30
New since " 1896 189,373	@	10¢			3,242.40
" " " 46,320	@	7¢			850.00
" " " 17,000	@	5¢			
			<u>\$192,798.00</u>	<u>296,612.50</u>	<u>23,029.70</u>
Increase of cost of earthwork, using same quantities as in report of 1896				192,798.00	

Lumber in Place.

In bridges and gates on Main Canal, Parallel Canal Extension "A" and Extension "B" Canals:

	Report of 1906.	Report of 1896.	Report of 1906. New work.
Bridges and Gates, as per Report of 1896,	\$55,536.50		
Bridges and Gates remodelled or replaced since 1896.		\$96,271.92	
Bridges and gates new since 1896. ....		.....	\$102,806.49
			<hr/>
	\$55,536.50	\$96,271.92	\$102,806.49
		55,536.50	
			<hr/>
Increase of cost of bridges and gates (remodelled or replaced) on sites as set forth in report of 1896.		\$40,735.42	
			<hr/>



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1644 *Comparison Between the Two Reports as to the Main Canal, Parallel Canal, Extension "A" and Extension "B" Canals.*

	Report of 1896.	Report of 1906.	Report of 1906. New work.
Earthwork, Page 3....	\$192,798.00	\$296,612.50	\$23,029.70
Lumber in Gates, etc., Page 3	55,536.50	96,271.92	102,806.49
Canal Stations	4,000.00	4,655.00	
Telephone Lines	4,900.00	4,970.00	
Engineering, etc.	25,723.40	45,290.12	
	<hr/> \$282,957.90	<hr/> \$447,799.54	<hr/> \$125,836.19
		282,957.90	

Increase of cost of canal and works on
same lines as set forth of 1896..... \$164,841.64

N. B.—Item \$29,400 for rights of way in report of 1896 omitted for the purpose of comparing costs of work. The Item not being used in report of 1906.

1645 *Summary of New Works, etc., in Report of 1906 Since Report of 1896.*

San Joaquin River Weir.....	\$54,046.50	
Headgate, China Slough.....	3,814.82	
New Bridges, Stop, Outlet and measuring gates on Main, Parallel Extensions "A" and "B" Canals.....	44,945.17	\$102,806.49
Earthwork, enlarging Main, Parallel, and Extension "A" Canals, 189,373 cubic yds.	18,937.30	
Drain Canal 46,320 cubic yds.....	3,242.40	
China Slough 17,000 " "	850.00	
252,693 yds		23,029.70
Horses and Carts	937.00	
Machinery and Tools, etc.	12,120.00	
Surveying & Telephone Instruments...	607.00	
Office Furniture	50.00	
	<hr/> 13,714.00	
Dos Palos System		135,133.08
Outside Canal and Extension		243,678.99
Outlet Canals No. 1, 2, 3, 4, 5.....		26,829.83
Orestimba Branch Canal		3,321.00
New Works and Sundry items, Total amount		\$548,513.09

Add the following estimated increase of cost of canal and works since 1896:

Earthwork, Main, Parallel & Extension "A," Page 3	103,814.50	
Lumber, Main, Parallel & Extension "A" and "B" Page 3	40,735.42	
Canal Stations " 4	655.00	
Telephone Lines " 4	70.00	
	<u>19,566.72</u>	
		164,841.64
Total increase of Estimated Cost and new work		\$713,354.73
Less item rights of way in report of 1896 to balance the estimated costs of the two reports	29,400.00	
Also less amount in error footing 1896 report	<u>.10</u>	
		<u>29,400.10</u>

Difference between the two reports Page 1 \$683,954.63

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 21. E. H. H., Master etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1646

COMPL'T'S EXHIBIT No. 23.

To the Trustees of the San Joaquin and Kings River Canal and Irrigation Company.

GENTLEMEN: We, a Committee of your Body, appointed under Resolution of our Board adopted Aug. 28th, 1879 "to take steps to settle without further litigation all matters in dispute in suits now pending between this Company and Miller & Lux", do hereby report as follows, viz:—

We have carefully examined the matters in controversy between our Company and Miller & Lux in the case now pending in the Nineteenth District Court of this State entitled "The San Joaquin & Kings River Canal and Irrigation Company against Miller & Lux" as set forth in the complaint of said Company; in the cross-complaint and answer of Miller & Lux and in the answer of the Company to the said cross-complaint.

In making this examination we have been actuated by a desire to arrive at the exact truth of the matter; to discover the true cause of the controversy, and, if possible, to settle the same equitably. In doing so we have gathered all the facts obtainable from sources on both sides of the question.

In the complaint and cross-complaint many of the allegations are trivial and on their face improbable, and bear evidence of being

rather the product of a bitter personal quarrel than of an honest effort to litigate a disputed point.

The material difference between these litigants, as we learn from the pleadings in the case, and from the testimony of persons well informed in the facts relative thereto, is as to the construction of Articles 5 and 10 of a certain agreement made between Miller & Lux and our Company, a true copy of which is attached to the complaint in said case and marked "Exhibit A".

1647 As to Article 10 our Company holds that sheep are not "cattle" within the scope of said agreement; this we think is an untenable position.

As to Article 5 Miller & Lux claim that said agreement shall run with the land to them, their tenants and grantees forever, to the extent of 50,000 acres, whilst our Company rather inconsistently repudiate the Article, claiming that it only ran for three years from date of contract. The Article is ambiguous and difficult of construction, but we think neither view is correct and we recommend the following compromise which we believe to be in accordance with the spirit of the contract and equitable and just to both parties.

As to the other matters alleged in the complaint and cross-complaint in said case, those which are probable and material are generally admitted in the respective answers, and in computing these items we find that they almost balance each other, leaving only a small sum in favor of Miller & Lux.

We would also call your attention to the fact that Miller & Lux have not conveyed to this Company the right of way to much of their land through which the canal passes, and the conveyances they have made are indefinite as to width. It is important that conveyances thereof should be obtained and in arranging a compromise we have made it a primary condition that Miller & Lux shall convey to this Company a right of way of 100 feet wide on each side of the center line of said Canal so far as said canal passes through their lands.

We therefore recommend that this company settle all matters of difference between them and said Miller & Lux upon the following terms viz:—

1. Said Miller & Lux shall by deed convey to this Company a right of way for said canal over their lands, when said canal has
1648 been constructed, of the width of one hundred feet on each side of the center of said Canal.
2. That subdivision Fifth of the contract referred to as "Exhibit A" in the complaint filed in said action shall be so construed as to apply to said Miller & Lux, their tenants, employees, heirs, executors, and administrators, and shall run with the land to the extent of Thirty-three thousand, three hundred and thirty-three and one-third acres (33,333 $\frac{1}{3}$ ac.), but shall not apply to the grantees of said Miller & Lux, or the grantees of their heirs, executors or administrators; and subdivision Tenth of said contract shall apply to all domestic animals owned, pastured or cared for by Miller & Lux, their tenants, employees, heirs, executors or administrators.
3. That the conditions and stipulations above referred to shall be

placed in such proper form as shall be binding upon this Company and said Miller & Lux, and

4. That when the same is done then said action and cross action shall be dismissed, each party releasing the other from all claims and demands referred to in said action and cross action.

San Francisco, Oct. 2, 1879.

WILLIAM CENTER.
JOSEPH ROSENBERG
JOHN H. BOLTON.

We recommend the above settlement.

J. C. Wilmerding	2,100	shares
J. D. Walker.....	4,941	"
Claus Spreckels	5,000	"
Forw'd	12,041	"
1649 Forw'd	12,041	shares
J. C. Stuart, Trustee.....	1,841	"
Timothy Paige	1,000	"
D. P. Barstow, Trustee.....	4,941	"
E. A. Richardson, Trustee.....	4,941	"
J. B. Haggin	1,000	"
Henry Pierce	1,000	"
James E. Gordon	500	"
Wm. I. Chapman	100	"
C. T. Pearson	300	"
Jos. Sedgley	300	"
John H. Bolton	100	"
Jesse S. Potter	4,250	"
Jos. Rosenberg	3,900	"
Miller & Lux	41,625	"
		<hr/>
		77,839

Endorsed: 219-"A". Report of Trustees' Committee in matter of Settlement of Matters in dispute with Miller & Lux and Approval by Stockholders October, 1879. U. S. Circuit Court, N. Dist. of Cal. The San Joaquin and Kings River Canal and Irrigation Co. vs. The County of Stanislaus, et al. No. 12257. Complainant's Exhibit 25. E. H. Examiner. Published and Filed Dec. 1st, 1899. Southard Hoffman, Clerk. No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 23. E. H. Master, etc. Filed May 14 1910. Southard Hoffman, Clerk. By J. A. Schaertzer, Deputy Clerk.

Decision.

From the pleadings and evidence in the above entitled cause, the Court finds the following to be the facts:

1. The plaintiff is now, and for more than ten years next before the commencement of this action has been, the owner and in the possession and entitled to the possession of all those certain lands situate, lying and being in the County of Merced, State of California, described as follows, to wit:

All those portions of Townships 6 South, Range 9 East, 7 South, Range 9 East, and 7 South, Range 10 East, Mount Diablo Meridian, which are comprised in swamp and Overflowed Land Surveys of said Merced County Nos. 156, 158, 157, 112, 113, 160, 155, 115, 114, 126, 129, 128, 131, 127, 124, 133, 132, 130, 233, 234, 232, 189, 85, 67, and 236, containing in all 2407.27 acres.

2. The San Joaquin River is a natural stream of water with well-defined bank and channel, through and over which channel of said river, throughout its entire course, water flows from the said Sierra Nevada Mountains to the Bay of San Francisco, and said river in its meanderings passes through the Counties of Fresno, Madera, Merced, and Stanislaus, in said state. The said channel of said river forms the south and west boundaries of the lands of plaintiff above described, and said lands border upon said river and are riparian thereto.

3. The plaintiff is, by virtue of his ownership of said lands, a riparian proprietor on said river; but he is not the owner of all or any of the water flowing in said river, and is entitled to the use and enjoyment of only so much of said water as a riparian proprietor is entitled to use by virtue of such proprietorship.

1651 4. Upon said above described land the plaintiff now pastures, and for more than ten years last past has continuously pastured, numbers of horses, mules, and cattle, and the said horses, mules, and cattle have been accustomed to and did water thereat.

5. The said land above described is adapted to irrigation by water from said river; but said water has not been used by plaintiff for the irrigation of said land, except such irrigation as is naturally caused by percolation and overflow thereon of the waters of said river. As a result of such percolation and overflow, the plaintiff has raised large crops of grass and feed on said land for the said horses, mules, and cattle pastured thereon.

6. The defendant is, and has been ever since the year 1871, a corporation duly organized, existing, and acting under and by virtue of the laws of the State of California.

7. The defendant was organized for the purpose, among others, of acquiring water rights and interests therein, of acquiring and holding land, of constructing and maintaining water ditches, canals, and other property, and of furnishing, supplying, and selling water

to its stockholders and others for domestic, stock, agricultural, mechanical, manufacturing, and other purposes.

8. In the year 1871, the defendant erected a dam in said Fresno County, and in and across the channel of the said San Joaquin River, and maintained the same thereafter continuously up to the year 1898, in which year it erected another dam at substantially the same place at which said former dam was situated; and, for more than five years prior to the commencement of this action, it had, by means of said former dam and its said present dam, diverted and taken from the said San Joaquin River a portion of the waters thereof amounting, whenever there was sufficient 1652 water in said river for that purpose, to 760 cubic feet thereof per second.

9. The defendant is, and for more than five years prior to the commencement of this action has been, the owner and in the possession and entitled to the possession of those certain lands in the Counties of Fresno and Madera in said state, described in "Schedule A" of the answer, of which lands sixteen hundred (1600) acres border on and are riparian to the said San Joaquin River.

10. The water so diverted by defendant from said river has, during all of said period, been conducted by it, through canals and ditches constructed, owned, and operated by it, through the said Counties of Fresno and Merced and into the said County of Stanislaus; and has been supplied and sold by it to other persons to be used, and which has by them been used, for the irrigation of land, and for domestic and stock and other beneficial purposes.

11. The land which has been so irrigated by the persons to whom the defendant has so sold said water does not and never did border upon the said San Joaquin River, and it is not and never was riparian thereto.

12. None of the said water so diverted by the defendant and used upon said non-riparian land has been wasted; but the same was consumed by said irrigation and other beneficial uses, and was not returned to said river above the plaintiff's said lands.

13. By reason of the said diversion of said water by defendant as aforesaid, the plaintiff has been deprived of the use of said water for plaintiff's said horses, mules, and cattle to drink, and for the irrigation of plaintiff's said lands; but plaintiff has not 1653 been damaged thereby in any sum of money.

14. From the year 1871, and down to the commencement of this action, the defendant has so maintained its dam and canals aforesaid, and diverted and used the water aforesaid, openly, continuously, and uninterruptedly, peaceably, and adversely to plaintiff and to all the world, under a claim of right and claiming the right so to do; all of which was, during all of said time, well known to plaintiff and his grantors and predecessors in interest.

15. The defendant threatens and intends to continue to divert said water, and a still greater quantity of water, from said river, and the diversion by defendant of any greater quantity than said amount of 760 cubic feet per second would result in the impairment of the fertility and value of plaintiff's said land, to the great

and irreparable damage and injury of plaintiff; and pecuniary compensation thereof would not afford adequate relief for such damage and injury.

16. Plaintiff's cause of action, so far as the same extends to said amount *to* 760 cubic feet of water per second, is barred by the provisions of Sections 318 and 319, and subdivision 2 of Section 338, of the Code of Civil Procedure; but his cause of action as to any of said water in excess of said amount of 760 cubic feet per second is not so barred.

17. The water diverted by the defendant into its canals cannot conveniently be measured at its head gates; but the same can conveniently be measured, with substantial accuracy, at a point on its Main Canal, distant 6134 feet, measured along the Northerly bank of said canal, from the upper face of the Head gate of said Main Canal; and the quantity of water carried by said canal at that point is substantially the quantity diverted by the defendant from 1654 said river.

And as conclusions of law from the foregoing facts the Court finds and decides:

(a) That defendant is entitled to divert from said San Joaquin River, by means of its dam and canals aforesaid, or by such other means as will produce substantially the same results, 760 cubic feet of water per second, and to use the same for the purposes for which it has so used said water as aforesaid.

(b) That the defendant is not entitled to divert from said San Joaquin River and carry or conduct onto any non-riparian land, any greater quantity of water than 760 cubic feet of water per second.

(c) That the quantity of water which the defendant may lawfully divert from said river for use upon lands riparian to said river is not in issue in this action, and there is no evidence from which the same can be determined, and the same is not hereby determined.

(d) Let judgment be entered enjoining and restraining the defendant, its counselors, attorneys, solicitors, and agents, and all others acting in aid or assistance of defendant, from diverting, above the said lands of plaintiff, more than 760 cubic feet of water per second from the San Joaquin River, for use upon, and from carrying or conducting to, any lands not riparian to said river, and awarding to plaintiff the sum of one dollar (\$1.) damages, but without costs.

(e) Said judgment is to be without prejudice to the right of plaintiff hereafter to commence and maintain such action or actions as he may be advised to determine and limit the quantity of water which the defendant may divert from said river for use upon lands riparian to said river.

M. L. SHORT,
Judge Presiding.

1656

COMPLAINANT'S EXHIBIT No. 25.

Decree.

This cause came on regularly for trial before the Court, sitting without a jury, on the 6th day of February, 1905, a jury trial having been waived. Messrs. James F. Peck, H. A. V. Torchiana, and Charles C. Boynton appeared for the plaintiff, and Messrs. R. E. Houghton, J. K. Law, and W. B. Treadwell appeared for the defendant. Thereupon witnesses were sworn and examined and documentary evidence introduced on behalf of the respective parties; and, after argument by counsel, the cause was submitted and by the Court taken under advisement.

And now, on this 2nd day of April, 1906, the Court, being fully advised in the premises, filed its findings of fact and conclusions of law, and orders judgment to be entered accordingly.

Wherefore, by reason of law and the finding aforesaid, it is by the Court here ordered, adjudged, and decreed:

1. That the defendant, The San Joaquin and Kings River Canal and Irrigation Company, is entitled to divert from the said San Joaquin River, by means of its dam and canals mentioned in the answer herein, or by such other means as will produce substantially the same results, seven hundred and sixty (760) cubic feet of water per second, and to use the same for the purposes of irrigation of land, and for domestic and stock and other beneficial purposes:

2. That said defendant is not entitled to divert from said river and carry or conduct to or upon any land not riparian to said river, any greater quantity of water than seven hundred and sixty (760) cubic feet per second;

3. That the quantity of water which said defendant may lawfully divert from said river for use upon lands riparian to said river, is not hereby determined;

4. That the said defendant, its counselors, attorneys, solicitors, and agents, and all other persons acting in aid or assistance of said defendant, are, and each of them is, hereby forever enjoined and restrained from diverting from said San Joaquin River, at any point above the lands of the plaintiff, J. J. Stevinson, hereinafter described, any greater quantity than seven hundred and sixty (760) cubic feet of water per second, for use upon, and from carrying or conducting the same to, any lands not riparian to said river;

The said lands of the said plaintiff are described as follows:

All those portions of Townships 6 South, Range 9 East, 7 South, Range 9 East, and 7 South, Range 10 East, Mount Diablo Meridian, which are comprised in Swamp and Overflowed Land Surveys of said Merced County Nos. 156, 158, 157, 112, 113, 160, 155, 115, 114, 126, 129, 128, 131, 127, 124, 133, 132, 130, 233, 234, 232, 189, 85, 67, and 236, containing in all 2407.27 acres:

5. For the purpose of the better enforcement of this decree, the quantity of water diverted by said defendant from said river for use upon non-riparian lands, is to be measured at that point in the Main

Canal of said defendant distant six thousand one hundred and thirty-four (6134) feet, measured along the Northerly bank of said Canal, from the upper face of the Head gate of said Main Canal; which said point of measurement has been agreed upon by the parties hereto;

The defendant shall, at all times, keep and maintain, at said place, a suitable foot-bridge across said canal, and all other necessary conditions to enable the water flowing in said canal at that place 1658 to be readily and conveniently measured by the parties hereto;

But, inasmuch as, by change of circumstances of otherwise, alterations in this decree with respect to said measurement may become necessary or proper, leave is hereby granted to either of the parties hereto, hereafter to apply to the Court, by supplemental pleading or in other suitable manner, for such alterations in or modifications of this decree as he or it may be advised to apply for, with respect to the place or manner of measurement of said water; and the Court hereby reserves the right at any time to alter or modify this decree, in those particulars, upon such application;

6. That the said plaintiff do have and recover of and from the said defendant the sum of one dollar (\$1.00) damages, but without costs;

7. That this decree shall be and is without prejudice to the right of said plaintiff hereafter to commence and maintain such action or actions as he may be advised, to determine and limit the quantity of water which said defendant may divert from said river for use upon lands riparian to said river.

M. L. SHORT,
Judge Presiding.

Endorsed: Filed April 2nd, 1906, W. B. Croop, Clerk.

Valuation of San Joaquin & Kings River Canal.

By W. C. Hammatt, C. E.

Notes September, 1908.

Calculations to July 1st, 1907.

1660 *Summary of Depreciation Calculations of S. J. & K. R. C. & I. Co.'s System up to July 1st, 1907.*

Fresno Co.	Name of canal.	Valuation.	Depreciation of structures.	Appreciation of earthwork.	Present value.
Headworks	84732.23	24285.71	.....	60446.52
Main Canal	106215.48	10111.10	18700.00	114804.38
Parallel Canal	50200.16	3369.72	8850.00	55680.44
Dos Palos	42558.68	9449.29	2785.00	35894.39
do. Branch 1.	11490.00	1805.83	790.00	10474.17
do. " 2.	4726.65	761.09	287.00	4252.56
Outside Canal	82134.10	4010.87	13550.00	91673.23
Outlet No. 1.	5270.73	572.42	482.00	5180.31
do. 2.	4299.43	718.97	385.00	3965.46
do. 3.	6052.15	908.87	630.00	5773.28
		<hr/>	<hr/>	<hr/>	<hr/>
		397683.61	55993.87	46459.00	388144.74

Merce Co.	Name of canal.	Valuation.	Depreciation of structures.	Appreciation of earthwork.	Present value.
do.	in Canal	74069.12	7780.15	11950.00	78238.97
do.	Ext. "A"	139652.12	12500.00	21400.00	148552.12
Para.	Canal	58882.20	5027.66	10100.00	63954.54
Dos Pa.	"	14670.80	3298.64	684.00	12056.16
do.	Ext'n	17668.93	1898.45	1730.00	17500.48
do.	" 1.	6453.42	281.58	1250.00	7421.84
do.	" 2.	13265.23	1901.82	1300.00	12663.41
do.	" 3.	14977.83	2193.78	1200.00	13984.05
do.	"	9321.54	1873.05	345.00	7793.49
Outside Canal.	"	86716.32	7123.56	11350.00	90942.76
do.	Ext'n	74828.57	4427.79	11600.00	82000.78
Outlet No. 4.	"	3384.30	721.56	125.00	2787.74
do.	" 5.	7823.22	1051.20	472.00	7244.02
		521713.60	50079.24	73503.00	545140.36
Stanislaus Co.					
do.	Main Canal Ext. "A"	40,363.92	4,057.99	5,670.00	41,975.93
do.	" "B"	29,097.50	4,204.39	3,540.00	28,433.11
Orestimba Br.	"	3,321.00	930.60	190.00	2,580.40
		72,782.42	9,192.98	9,400.00	72,989.44

Place.	Length.	Width.	Acres.	Price.	Value.
Fresno County.					
Headworks .....	.....	.....	78.44	\$15.00	1176.60
China Slough	7400 ft.	300'	51.00	15.00	765.00
Main Canal	57450 ft.	200'	264.00	15.00	3960.00
Parallel Canal	53750 ft.	250'	308.00	15.00	4620.00
Outside "	100000 ft.	200'	459.00	15.00	6885.00
Outlet Canal #1	4350 ft.	100'	10.00	15.00	150.00
" " #2	5870 ft.	100'	13.50	15.00	202.50
" " #3	5710 ft.	100'	13.10	15.00	196.50
Colony "	46700 ft.	156'	167.50	15.00	2512.50
" " Br. #1	14500 ft.	125'	41.50	15.00	622.50
" " Br. #2	5280 ft.	114'	13.80	15.00	207.00
				<hr/>	<hr/>
				1419.84	\$21297.60
Merced County.					
Parallel Canal	87356 ft.	250'	501.	60.00	30060.00
Main "	2117 ft.	200'	9.70	60.00	582.00
" Canal Ex. "A"	111600 ft.	200'	514.00	60.00	30840.00
Outside "	80000 ft.	200'	367.50	60.00	22050.00
" " Ex	78500 ft.	200'	360.00	60.00	21600.00
Outlet " #4	1000 ft.	100'	4.40	60.00	264.00
" " #5	7200 ft.	100'	16.60	60.00	996.00

Colony	Place.	Length.	Width.	Acres.	Price.	Value.
"	.....	11800 ft.	156'	42.30	60.00	2538.00
"	Ex.	17600 ft.	140'	56.60	60.00	3396.00
"	Br. #1	8500 ft.	125'	24.40	60.00	1464.00
"	" #2	18520 ft.	114'	48.50	60.00	2910.00
"	" #3	21900 ft.	116'	58.30	60.00	3498.00
"	" #4	15625 ft.	100'	35.80	60.00	2148.00
Los Banos Town Lots, 6 lots @ .....		.....	.....	.....	100.00	600.00
Quinto Sec. House. ....		.....	.....	154.00	60.00	9240.00
				2193.10		\$132186.00
Stanislaus County.						
Main Canal Ex. "A"		40800 ft.	200'	187.50	100.00	18750.00
" " "B"		21800 ft.	200'	100.00	100.00	10000.00
				287.50		\$28750.00

(Notes Taken Sept., 1908.)

General Items.

Item.	Value (new).	% dep.	Amt. dep.	Present value.
Dam	\$54046.50	25	\$13511.62	.....
Headgate	4853.86	80	3883.09	.....
Controlling Weir	7785.05	80	6128.04	.....
China Slough Hd. Gate	3814.82	20	762.96	.....
Section Houses	1455.00	0	.....	.....
Machinery & tools	12120.00	..	.....	.....
Surveying & Tel. Inst.	607.00	..	.....	.....
Office Furniture	50.00	..	.....	.....
	<hr/>	<hr/>	<hr/>	<hr/>
	\$84732.23	..	\$24285.71	\$60,446.52

Main Canal.

Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. app.	Pres. value.
Excavation	\$73,290.00	.....	.....	\$18,700.00	.....
"China Slo.	850.00	.....	.....	.....	.....
Structures	\$20,945.33	.....	\$9,816.26	.....	.....
Tel. Lines	1,474.20	20%	294.84	.....	.....
Eng. & Supt.	9,655.95	.....	.....	.....	.....
	<u>\$103,215.48</u>	.....	<u>\$10,111.10</u>	<u>\$18,700.00</u>	<u>\$114,804.38</u>

Detail List of Structures.

Sta.	Description.	Cost (Goodwin).	% dep.	Amt. dep.	Pres. value.
0-0	Bridge	\$377.68	30	\$113.30	.....
48-43	Waste Gate 20'	1,054.02	50	527.01	.....
59-41	Outlet, 6'	266.14	60	159.68	.....
75-01	Waste, 20'	1,054.02	60	632.41	.....
74-16	Outlet, 8'	280.85	80	224.68	.....
86-00	Outlet, 6'	266.14	70	186.30	.....
108-08	Outlet, 8'	280.85	70	196.60	.....
137-07	Bridge	915.07	30	274.52	.....
do.	Stop Gate	4,843.96	30	1,453.19	.....
259-47	Waste	368.31	50	184.15	.....
308-32	Bridge	318.99	100	318.99	.....

332-60	Waste	.....	7'	1,200.54	70	840.38	.....
336-25	Outlet	.....	20'	280.85	100	280.85	.....
336-80	Outlet	.....		1,054.02	80	843.22	.....
337-12	Stop Gate	.....		1,088.30	80	870.64	.....
363-93	Bridge	.....		521.33	10	52.13	.....
378-28	Bridge	.....		377.10	80	301.68	.....
495-82	Bridge	.....		296.17	90	266.56	.....
502-00	Outlet	.....		266.14	10	26.61	.....
555-90	Outlet	.....		327.80	10	32.78	.....
578-28	Bridge	.....		435.22	20	87.04	.....
585-56	Stop Gate	.....	5'	1,012.44	0	.....	.....
754-40	Outlet	.....		255.20	50	127.60	.....
761-50	Inlet	.....		188.12	50	59.06	.....
762-13	Bridge	.....		340.51	80	272.41	.....
767-00	Inlet	.....		336.60	50	168.30	.....
810-32	Outlet	.....		255.20	60	153.12	.....
893-20	Outlet	.....		255.20	60	153.12	.....
894-24	Br. weir	.....		413.70	80	330.96	.....
1001-88	Outlet	.....		255.20	60	153.12	.....
1013-30	Inlet	.....		308.04	50	154.02	.....
1029-40	Bridge	.....		286.22	60	171.73	.....
1056-67	Outlet	.....		255.20	00	.....	.....
1083-52	Outlet	.....		255.20	50	127.60	.....
	Meas. Gates	.....		725.00	10	72.50	.....
				\$20,945.33	....	\$9,816.26	.....

Parallel Canal.

Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. app.	Pres. value.
Excavation	\$34,704.00	.....	.....	\$8,850.00	.....
Structures	10,932.51	.....	\$3,369.72	.....	.....
Eng. & Supt	4,563.65	.....	.....	.....	.....
	<u>\$50,200.16</u>	.....	<u>\$3,369.72</u>	<u>\$8,850.00</u>	<u>\$55,680.44</u>

Detail List of Structures.

Sta.	Description.	Cost (Goodwin).	% Dep.	Amt. dep.	Pres. value.
584-91	Outlet	\$327.69	10	\$32.77	.....
585-56	Stop gate	1,101.20	60	660.72	.....
599-41	Outlet	244.64	10	24.46	.....
621-71	Outlet	244.64	10	24.46	.....
642-98	"	244.64	10	24.46	.....
671-91	"	244.64	10	24.46	.....
685-47	Bridge	403.30	90	362.97	.....
699-96	Outlet	244.64	10	24.46	.....
727-58	"	244.64	10	24.46	.....
740-32	"	244.64	10	24.46	.....
755-06	"	244.64	10	24.46	.....
762-13	Stop Gate	936.56	80	749.25	.....
769-41	Outlet	199.54	10	19.95	.....

383-25	.....	199.54	10	19.95	.....
797-22	.....	199.54	10	19.95	.....
810-32	.....	199.54	10	19.95	.....
837-16	.....	199.54	10	19.95	.....
864-65	.....	244.64	10	24.46	.....
878-45	.....	244.64	10	24.46	.....
599-41	.....	244.64	10	24.46	.....
894-24	.....	244.64	10	24.46	.....
920-95	.....	863.70	80	690.96	.....
937-70	.....	244.64	10	24.46	.....
947-67	.....	244.64	10	24.46	.....
960-94	.....	244.64	10	24.46	.....
973-90	.....	244.64	10	24.46	.....
1001-88	.....	265.65	10	24.46	.....
1015-55	.....	265.65	10	26.57	.....
1029-40	.....	124.30	10	12.43	.....
1039-00	.....	286.22	60	171.73	.....
1056-07	.....	265.65	10	26.57	.....
1083-52	.....	265.65	10	26.57	.....
Meas. Gates	.....	915.00	10	91.50	.....
		\$10,931.51	.....	\$3,369.72	.....

Summary.

Item.	Cost.	(% dep.)	(Amt. dep.)	(Amt. app.)	Present value.
Excavation	\$10,961.70	.....	.....	\$2,785.00	.....
do. Side Canal	591.50	.....	.....	.....	.....
Structures	\$27,136.51	.....	\$9,449.29	.....	.....
Eng. & Supt.	3,868.97	.....	.....	.....	.....
	<u>\$42,558.68</u>	.....	<u>\$9,449.29</u>	<u>\$2,785.00</u>	<u>\$35,894.39</u>

Detail of Structures.

Sta.	Description.	Cost (Goodwin).	% dep.	(Amt. dep.)	Pres. value.
1-25	Headgate	\$918.13	100%	\$918.13	.....
2-45	Stop gate	1,035.96	20	207.19	.....
17-29	"	800.91	40	320.36	.....
46-61	"	700.89	10	70.09	.....
	Pipe box	795.74	50	397.87	.....
74-30	Outlet	82.50	60	49.50	.....
74-75	Outlet	465.63	50	232.81	.....
74-87	Stop Gate	713.90	30	214.17	.....
94-88	Bridge	193.06	50	96.53	.....
94-73	Outlet	82.50	20	16.50	.....
95-10	"	82.50	20	16.50	.....
98-25	Pipe Box	550.00	50	275.00	.....

116-81	Outlet	82.50	20	16.50	.....
132-10	Pipe Box	500.00	50	250.00	.....
134-56	Waste Gate	580.36	70	406.25	.....
143-89	Outlet	258.39	20	51.68	.....
148-30	"	284.52	20	56.90	.....
149-20	Stop Gate	713.90	60	428.34	.....
198-60	Pipe Box	400.00	50	200.00	.....
213-34	Outlet	331.34	20	66.27	.....
217-15	Bridge	246.06	20	49.21	.....
224-87	Outlet	284.52	20	56.90	.....
232-56	Pipe Box	700.00	50	350.00	.....
233-32	Outlet	82.50	20	16.50	.....
255-51	"	284.52	20	56.90	.....
256-72	"	284.52	20	56.90	.....
271-89	"	331.34	20	66.27	.....
272-46	"	284.52	20	56.90	.....
272-88	Stop Gate	713.90	50	356.95	.....
283-88	Outlet	284.52	20	56.90	.....
293-40	"	284.52	20	56.90	.....
293-78	Bridge	246.06	50	123.03	.....
308-45	H. G. C. F. Branch	690.74	50	345.37	.....
308-50	Outlet	284.52	20	56.90	.....
309-10	"	50.00	20	10.00	.....
309-35	Stop Gate	713.90	..	.....	.....
326-25	Outlet	50.00	20	10.00	.....
348-86	"	55.00	20	11.00	.....
355-90	"	55.00	20	11.00	.....
359-75	H. G. West branch	690.74	20	138.15	.....
360-00	Outlet	50.00	20	10.00	.....

Sta.	Description.	Cost (Goodwin).	% dep.	(Amt. dep.)	Pres. value.
1656					
362-04	Stop Gate	\$713.90	20	\$142.78	.....
370-16	Outlet	258.39	20	51.68	.....
387-00	"	55.00	20	11.00	.....
388-00	Pipe Box	1,000.00	50	500.00	.....
388-30	Outlet	55.00	20	11.00	.....
389-36	Bridge	471.20	20	94.24	.....
390-00	Outlet	241.78	20	48.36	.....
396-70	"	241.78	20	48.36	.....
398-00	"	241.78	20	48.36	.....
402-00	H. G. Br. #1	614.83	40	245.93	.....
403-71	Outlet	82.50	20	16.50	.....
403-88	Stop Gate	713.90	50	356.95	.....
404-55	Outlet	55.00	20	11.00	.....
409-14	"	55.00	20	11.00	.....
415-64	"	41.00	20	8.20	.....
418-86	"	55.00	20	11.00	.....
421-80	"	55.00	20	11.00	.....
426-89	Bridge	643.23	40	257.29	.....
426-95	Outlet	258.39	20	51.68	.....
429-14	Bridge	324.50	40	129.80	.....
429-52	Outlet	241.78	20	48.36	.....
429-52	"	241.78	20	48.36	.....
433-40	"	331.34	20	66.27	.....
443-40	"	241.78	20	48.36	.....
433-78	Stop Gate	713.90	50	356.95	.....
438-36	Outlet	55.00	20	11.00	.....
438-40	"	284.52	20	56.90	.....

448-78	"	41.00	20	8.20	.....
451-15	"	241.78	20	48.36	.....
455-40	"	41.00	20	8.20	.....
455-80	Outlet	241.78	20	48.36	.....
459-54	"	241.78	20	48.36	.....
462-33	"	241.78	20	48.36
466-45	"	321.50	70	227.15
Mens. Gates	1,236.00	10	123.60
		\$27,136.51	\$9,449.29

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Fresno County.

Branch # 1, Colony Canal.

Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. app.	Present value.
Excavation	\$3,102.96	.....	.....	\$790.00	.....
Structures	\$7,342.50	.....	\$1,805.83	.....	.....
Eng. & Supt.	\$1,044.54	.....	.....	.....	.....
	\$11,490.00	.....	\$1,805.83	\$790.00	\$10,474.17

Detail of Structures.

Sta.	Description.	Cost (Goodwin).	% dep.	Amt. dep.	Pres. value.
0-75	Outlet	\$375.00	20%	\$75.00	.....
5-00	"	87.78	20	17.56	.....
6-85	"	72.60	20	14.52	.....
11-51	"	72.60	20	14.52	.....

Sta.	Description.	Cost (Goodwin).	% Dep.	Amt. dep.	Pres. value.
14-60	"	72.60	20	14.52	.....
14-89	"	72.60	20	14.52	.....
17-73	"	72.60	20	14.52	.....
18-15	"	87.78	20	17.56	.....
21-45	"	87.78	20	17.56	.....
24-72	"	72.60	20	14.52	.....
24-72	"	72.60	20	14.52	.....
28-36	"	87.78	20	17.56	.....
31-83	"	72.60	20	14.52	.....
34-20	"	581.90	30	174.57	.....
34-79	Stop Gate	41.00	20	8.20	.....
36-60	Outlet	87.78	20	17.56	.....
41-07	"	192.25	30	57.67	.....
47-42	Bridge	72.60	20	14.52	.....
47-63	Outlet	72.60	20	14.52	.....
47-63	"	41.00	20	8.20	.....
49-86	"	87.78	20	17.56	.....
54-03	"	125.00	20	25.00	.....
54-10	"	155.95	70	62.26	.....
57-51	Bridge	72.60	20	14.52	.....
58-21	Outlet	41.00	20	8.20	.....
58-64	"	72.60	20	14.52	.....
60-60	"	72.60	20	14.52	.....
63-93	"	87.78	20	17.56	.....
66-05	"	192.25	40	76.90	.....
73-63	Bridge	72.60	20	14.52	.....
73-89	Outlet	72.60	20	14.52	.....
73-89	"	72.60	20	14.52	.....
78-48	"	72.60	20	14.52	.....
83-32	"	72.60	20	14.52	.....

.....	20	14.52	.....
.....	30	134.44	.....
.....	30	174.57	.....
.....	30	57.67	.....
.....	20	14.52	.....
.....	20	14.52	.....
.....	20	14.52	.....
.....	20	14.52	.....
.....	20	56.91	.....
.....	20	232.76	.....
.....	40	56.91	.....
.....	20	14.52	.....
.....	20	57.67	.....
.....	20	14.52	.....
.....	10	67.50	.....
.....	.....	\$1,805.83	.....

.....	72.60	.....
.....	448.14	.....
.....	581.90	.....
.....	192.25	.....
.....	72.60	.....
.....	72.60	.....
.....	72.60	.....
.....	72.60	.....
.....	284.57	.....
.....	581.90	.....
.....	284.57	.....
.....	72.60	.....
.....	192.25	.....
.....	72.60	.....
.....	675.00	.....
.....	.....	\$7,342.50

Fresno County.

Branch # 2, Colony Canal.

Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. app.	Pres. value.
Excavation	\$1,129.92	.....	.....	\$287.00	.....
Structures	\$3,167.04	.....	\$761.09	.....	.....
Eng. & Supt.....	\$429.69	.....	.....	.....	.....
	\$4,726.65	.....	\$761.09	\$287.00	\$4,252.56

Detail of Structures.

Sta.	Description.	Cost (Goodwin).	% dep.	Amt. dep.	Pres. value
1-65	Outlet	\$72.60	20	\$14.52	.....
1-65	"	72.60	20	14.52	.....
5-83	"	55.00	20	11.00	.....
9-60	"	55.00	20	11.00	.....
11-00	"	20.00	20	4.00	.....
12-47	"	20.00	20	4.00	.....
14-69	"	72.60	20	14.52	.....
14-69	"	72.60	20	14.52	.....
18-80	"	30.00	20	6.00	.....
19-00	"	223.08	20	44.62	.....
19-30	Stop Gate	467.94	30	140.38	.....
26-56	Outlet	30.00	20	6.00	.....
31-40	"	41.00	20	8.20	.....
32-12	Bridge	147.05	40	58.82	.....
32-30	Outlet	87.78	20	17.56	.....
32-30	"	246.18	20	49.24	.....
32-86	"	30.00	20	6.00	.....
35-06	Stop Gate	467.94	30	140.38	.....
36-70	Outlet	87.78	20	17.56	.....
40-08	"	100.00	20	20.00	.....
41-90	"	55.00	20	11.00	.....
45-10	"	55.00	20	11.00	.....
45-20	Bridge	147.05	40	58.82	.....
47-89	Outlet	87.78	20	17.56	.....
49-13	"	87.78	20	17.56	.....
51-89	"	87.78	20	17.56	.....
	Meas. Gates	247.50	10	24.75	.....
		\$3,167.04	.....	\$761.09	.....

Fresno County.

Outside Canal.

Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. app.	Pres. value.
Eng. & Supt.....	\$7,466.73	.....	.....	.....	.....
Excavation	53,240.00	.....	.....	\$13,550.00	.....
Side Canal	5,600.00	.....	.....	.....	.....
Structures	15,827.37	.....	\$4,010.87	.....	.....
	<u>\$82,134.10</u>	.....	<u>\$4,010.87</u>	<u>\$13,550.00</u>	<u>\$91,673.23</u>

Detail of Structures.

Sta.	Description.	Cost (Goodwin).	% dep.	Amt. dep.	Pres. value.
0-00	H. G.	\$1,985.39	30%	\$595.62	.....
191-47	Outlet	364.23	10	36.42	.....
245-58	Bridge	596.92	30	179.08	.....
245-58	"	45.15	30	13.55	.....
266-00	Stop Gate	150.50	20	30.10	.....
267-66	Outlet	364.23	10	36.42	.....
269-37	Stop Gate	937.46	20	187.49	.....
392-00	"	150.50	20	30.10	.....
392-87	Bridge	561.36	20	112.27	.....
"	"	45.15	20	9.03	.....
406-43	Bridge	410.21	30	123.06	.....
407-50	Stop Gate	150.50	30	45.15	.....

Sta.	Description.	Cost (Goodwin).	% dep.	Amt. dep.	Pres. value.
407-76	"	937.46	30	281.24	.....
497-00	"	150.50	30	45.15	.....
500-18	Outlet	364.23	10	36.42	.....
535-00	Stop Gate	150.50	30	45.15	.....
537-	"	150.50	30	45.15	.....
587	"	150.50	30	45.15	.....
589-92	Bridge	285.67	10	28.57	.....
593	Stop Gate	150.50	20	30.10	.....
601-70	Outlet	364.23	10	36.42	.....
602-93	Stop Gate	937.46	50	468.73	.....
607	"	150.50	20	30.10	.....
715-85	"	150.50	20	30.10	.....
716-15	Outlet	364.23	10	36.42	.....
720	Stop gate	150.50	20	30.10	.....
783-50	"	150.50	20	30.10	.....
786-55	Outlet	364.23	10	36.42	.....
"	Bulkhead	45.00	20	9.00	.....
787-70	Stop Gate	937.46	30	281.24	.....
791	"	150.50	20	30.10	.....
852-10	Bridge	509.04	30	152.71	.....
"	"	45.15	30	13.55	.....
969-77	"	298.83	30	89.65	.....
969-	Stop gate	150.50	30	45.15	.....
"	"	150.50	30	45.15	.....
971-63	Outlets	991.78	40	396.71	.....
	Mous. Gates	1,125.00	20	225.00	.....
		690.00	10	69.00	.....
		\$15,827.37	....	\$4,010.87	.....

Fresno County.
Outlet # 1.
Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. appr.	Pres. value.
Excavation	\$1,883.50	.....	.....	\$482.00	.....
Structure	2,908.08	30%	.....	.....	.....
Eng. & Supt.....	479.15	.....	\$572.42	.....	.....
	<u>\$5,270.73</u>	.....	<u>\$572.42</u>	<u>\$482.00</u>	<u>\$5,180.31</u>

Outlet # 2.
Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. appr.	Present value.
Excavation	\$1,512.00	.....	.....	\$385.00	.....
Structures	2,396.58	30%	.....	.....	.....
Eng. & Supt.....	390.85	.....	\$718.97	.....	.....
	<u>\$4,299.43</u>	.....	<u>\$718.97</u>	<u>\$385.00</u>	<u>\$3,965.46</u>

Outlet # 3.
Summary.

Item.	Cost.	% dep.	Amt. dep.	Amt. appr.	Pres. value.
Excavation	\$2,472.40	.....	.....	\$630.00	.....
Structures	3,029.56	30%	.....	.....	.....
Eng. & Supt.....	550.19	.....	\$908.87	.....	.....
	<u>\$6,052.15</u>	.....	<u>\$908.87</u>	<u>\$630.00</u>	<u>\$5,773.28</u>

Main Canal.

Item.	Cost (Goodwin).	% dep.	(Amt. dep.)	(Amt. app.)	Pres. value.
Structures	\$16,117.37	.....	\$7,542.99	.....	.....
Excavation	46,790.00	.....	.....	\$11,950.00	.....
Drain Canal	3,242.40	.....	.....	.....	.....
Tele. Line	1,185.80	20%	237.16	.....	.....
Eng. & Supt.	6,733.55	.....	.....	.....	.....
	<u>\$74,069.12</u>	.....	<u>\$7,780.15</u>	<u>\$11,950.00</u>	<u>\$78,238.97</u>

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Pres. value.
1128-00	Inlet	\$120.75	50	\$60.37	.....
1129-40	"	318.38	50	159.19	.....
1163-00	Outlet	260.28	50	130.14	.....
1386-70	Inlet	318.38	50	159.19	.....
1346-00	"	318.38	50	159.19	.....
1346-22	Waste	2,387.11	50	1,193.55	.....
1347-13	Stop Gate	1,737.39	50	868.69	.....
1359-00	Inlet	318.38	80	254.70	.....
1375-70	Inlet	318.38	80	254.70	.....
1396-20	"	318.38	80	254.70	.....
1460-30	Inlet	318.38	80	254.70	.....
1499-75	Inlet	89.21	80	71.37	.....
1517-33	Bridge	273.21	80	218.57	.....

1615-55	Outlet	260.28	70	182.20	.....
1644-15	Inlet	318.38	80	254.70	.....
1645-15	Bridge	304.08	30	91.22	.....
1650-00	Outlet	260.28	80	208.22	.....
1713-90	Bridge	352.59	30	105.78	.....
1717-40	Outlet	260.28	80	208.22	.....
1745-54	Pipe Drain	1,200.00	20	240.00	.....
1778-57	Bridge	394.92	50	197.46	.....
1800-58	Bridge	375.00	50	187.50	.....
1814-00	Outlet	260.28	70	182.20	.....
1835-92	Bridge	278.50	30	83.55	.....
1864-00	Outlet	260.28	70	182.20	.....
1894-00	Outlet	260.28	70	182.20	.....
1936-57	Siphon	2,500.00	20	500.00	.....
1939-00	Outlet	260.28	60	156.17	.....
2003-38	Stop Gate	950.95	20	190.19
2004-49	Bridge	375.00	70	262.50
2004-49	Waste	149.38	60	89.62
		\$16,117.37	\$7,542.99

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Merced County.

Main Canal Extension "A."

Item.	Cost (goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Structures	\$41,407.28	.....	\$12,204.55	.....	.....
Excavation	84,069.40	.....	.....	\$21,400.00	.....
Telephone	1,479.80	20%	295.96	.....	.....
Eng. & Supt.	12,695.64	.....	.....	.....	.....
	<u>\$139,652.12</u>	.....	<u>\$12,500.51</u>	<u>\$21,400.00</u>	<u>\$148,552.12</u>

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	Amt. dep.	Pres. value.
2016-67	Waste	\$4,082.87	40	\$1,633.15	.....
2021-32	Stop gate	2,063.32	60	1,237.99	.....
2021-32	Outlet	215.73	10	21.57	.....
2021-30	Inlet	128.70	70	90.09	.....
2054-99	Outlet	100.00	10	10.00	.....
2076-96	Bridge	370.65	40	148.26	.....
2077-55	Outlet	143.88	10	14.39	.....
2102-34	"	110.99	10	11.10	.....
2107-54	"	143.88	10	14.39	.....
2115-17	Bridge	280.24	70	196.17	.....
2117-00	Outlet	215.73	10	21.57	.....
2120-88	"	100.00	10	10.00	.....
2127-38	"	128.70	10	12.87	.....
2138-00	"	110.99	10	11.10	.....
2152-37	"	143.88	10	14.38	.....

2155-01	Stop gate	1,070.85	20	214.17
2189-58	Outlet	100.00	10	10.00
2193-30	Bridge	223.99	50	112.00
2193-73	Outlet	100.00	10	10.00
2205-02	Inlet	215.73	70	151.01
2266-34	Bridge	200.00	10	20.00
2290-14	Waste	335.08	10	33.51
2299-00	Outlet	110.99	10	11.10
2324-65	Inlet	189.86	20	37.97
2325-03	Outlet	100.00	10	10.00
2341-19	Br.	310.35	80	248.30
2360-70	Outlet	110.99	10	11.10
2377-24	Br.	375.00	20	75.00
2383-56	Outlet	110.99	10	11.10
2398-20	Inlet	327.69	20	65.53
2399-13	Outlet	110.99	10	11.10
2405-62	Br.	342.00	40	136.80
2406-46	Outlet	215.73	10	21.57
2432-30	"	327.69	10	32.77
2433-90	Inlet	327.69	20	65.53
2453-96	Outlet	143.88	10	14.39
2459-60	"	143.88	10	14.39
2460-15	Stop gate	1,090.92	10	109.09
2461-67	"	1,064.03	20	212.81
2485-02	Outlet	327.69	10	32.77
2485-13	Inlet	327.69	20	65.53
2501-54	"	327.69	20	65.53
2501-54	Outlet	327.69	10	32.77
2507-00	"	100.00	10	10.00
2578-42	"	100.00	10	10.00

Sta.	Description.	Cost.	% dep.	Amt. dep.	Pres. value.
2597-00	"	215.73	10	21.57	.....
2608-48	"	50.00	10	5.00	.....
1673					
2609-09	Outlet	75.00	10	7.50	.....
2610-12	Stop Gate	998.80	50	499.40	.....
2625-85	Outlet	215.73	10	21.57	.....
2626-13	Bridge	365.82	50	182.91	.....
2639-82	Outlet	110.99	10	11.10	.....
2659-42	"	110.99	10	11.10	.....
2669-45	"	100.00	10	10.00	.....
2680-04	Bridge	375.00	50	187.50	.....
2680-46	"	200.00	20	40.00	.....
2684-61	Outlet	50.00	10	5.00	.....
2687-09	"	215.73	10	21.57	.....
2689-63	"	50.00	10	5.00	.....
2702-63	"	100.00	10	10.00	.....
2704-85	"	215.73	10	21.57	.....
2724-12	"	50.00	10	5.00	.....
2728-70	"	215.73	10	21.57	.....
2739-32	"	75.00	10	7.50	.....
2739-74	Stop gate	1,090.92	50	545.46	.....
2740-61	Bridge	400.00	30	120.00	.....
2754-73	Outlet	100.00	10	10.00	.....
2767-51	"	100.00	10	10.00	.....
2768-04	"	215.73	10	21.57	.....
2783-26	"	100.00	10	10.00	.....
2784-63	"	50.00	10	5.00	.....
2792-40	"	358.76	10	35.88	.....

2792-90	Inlet	358.76	10	35.88	.....
2803-88	Outlet	143.88	10	14.39	.....
2804-00	Inlet	50.00	10	5.00	.....
2815-80	Outlet	215.73	10	21.57	.....
2815-80	"	215.73	10	21.57	.....
2825-48	Bridge	349.65	40	139.86	.....
2826-73	Inlet	358.76	10	35.88	.....
2826-77	Outlet	358.76	10	35.88	.....
2832-00	"	143.88	10	14.39	.....
2846-18	"	50.00	10	5.00	.....
2856-53	Stop gate	1,385.89	50	692.95	.....
	Waste gate	981.69	50	490.85	.....
2857-05	Stop gate	1,385.89	50	692.95	.....
2876-52	Inlet	358.76	10	35.88	.....
2876-52	Outlet	358.76	10	35.88	.....
2881-61	Bridge	448.56	70	313.99	.....
2893-62	Outlet	215.73	10	21.57	.....
2897-45	"	255.75	10	25.58	.....
2907-44	"	255.75	10	25.58	.....
2908-18	Stop gate	700.48	40	280.19	.....
2910-41	Bridge	500.00	50	250.00	.....
2911-29	Outlet	215.73	10	21.57	.....
2921-78	"	125.00	10	12.50	.....
2936-45	Bridge	318.15	50	159.08	.....
2937-29	Outlet	215.73	10	21.57	.....
2937-68	"	50.00	10	5.00	.....
2941-69	"	143.88	10	14.39	.....
2947-57	Outlet	110.99	10	11.10	.....
2967-29	"	215.73	10	21.57	.....
2967-60	Stop gate	941.98	50	472.49	.....

Sta.	Description.	Cost.	% dep.	Amt. dep.	Pres. value.
2981-35	Outlet	110.99	10	11.10	.....
2994-88	"	110.99	10	11.10	.....
3003-15	"	215.73	10	21.57	.....
3007-26	"	110.99	10	11.10	.....
3027-47	"	215.73	10	21.57	.....
3048-55	"	110.99	10	11.10	.....
3053-39	"	110.99	10	11.10	.....
3058-33	"	110.99	10	11.10	.....
3059-29	"	215.73	10	21.57	.....
3069-74	Stop gate	756.12	40	302.45	.....
3077-93	Bridge	363.12	50	186.56	.....
3079-95	Outlet	143.88	10	14.39	.....
3086-24	"	143.88	10	14.39	.....
3093-03	"	215.73	10	21.57	.....
3105-30	Inlet	110.99	10	11.10	.....
3105-69	Bridge	202.65	50	101.33	.....
1674					
3118-87	Outlet	110.99	10	11.10	.....
3121-22	Outlet	255.75	10	25.58	.....
3124-97	"	100.00	10	10.00	.....
3125-11	"	50.00	10	50.00	.....
	Measuring Gates	2,494.00	10	249.40	.....
		\$41,407.28	.....	\$12,204.55	.....

Parallel Canal.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt app.	Pres. value.
Structures					
Excavation	\$13,918.67	.....	\$5,027.66	.....	.....
Eng. & Supt.....	39,610.60	.....	.....	\$10,100.00	.....
	5,352.93	.....	.....	.....	.....
Total.....	\$58,882.20	\$5,027.66	\$10,100.00	\$63,954.54

THE COUNTY OF STANISLAUS, ETC., ET AL.

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Detail List of Structures.

Sta.	Description.	Cost	% dep.	(Amt. dep.)	Pres. value.
1133-50	Outlet	\$125.73	10	\$12.57
1148-13	"	162.25	10	16.23	.....
1163-68	"	125.73	10	12.57	.....
1226-95	Outlet	125.73	10	12.57	.....
1228-83	Stop Gate	612.92	40	245.17	.....
1346-22	Waste gate	2,083.86	60	1,250.32	.....
1346-93	Stop Gate	957.77	60	574.66	.....
1380-77	Outlet	75.00	10	7.50	.....
1445-16	"	75.00	10	7.50	.....
1463-22	"	94.38	10	9.44	.....
1517-33	Bridge	357.00	80	285.60	.....
1521-51	Outlet	94.38	10	9.44	.....
1583-16	"	100.00	10	10.00	.....
1635-20	"	94.38	10	9.44	.....
1645-15	Bridge	304.08	30	91.22	.....
1656-33	Outlet	254.24	10	25.42	.....
1695-07	"	94.38	10	9.44	.....

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Pres. value.
1713-00	"	254.24	10	25.42	.....
1713-90	Bridge	349.50	30	104.85	.....
1717-68	Outlet	94.38	10	9.44	.....
1721-06	"	94.38	10	9.44	.....
1732-28	"	125.73	10	12.57	.....
1761-77	"	94.38	10	9.44	.....
1777-25	"	254.24	10	25.42	.....
1778-57	Stop Gate	999.98	75	750.00	.....
1800-38	Bridge	400.00	30	120.00	.....
1814-41	Outlet	254.24	10	25.42	.....
825-93	"	80.00	10	8.00	.....
1829-00	"	254.24	10	25.42	.....
1834-00	"	94.38	10	9.44	.....
1835-82	Bridge	321.72	50	160.36	.....
1846-80	Outlet	254.24	10	25.42	.....
1858-00	"	187.77	10	18.78	.....
1863-57	"	94.38	10	9.44	.....
1864-00	"	254.24	10	25.42	.....
1883-00	"	143.30	10	14.33	.....
1893-21	"	254.24	30	25.42	.....
1893-54	Stop Gate	855.80	50	427.90	.....
1894-61	Bridge	500.00	40	200.00	.....
1938-00	Bridge	500.00	50	250.00	.....
1938-75	Outlet	254.24	10	25.42	.....
1977-99	"	254.24	10	25.42	.....
1994-00	"	50.00	10	5.00	.....
	Meas. Gates	908.00	10	90.80	.....
		\$13,918.67	....	\$5,027.66	.....

Colony Canal.

Item.	Cost (Goodwin).	% dep.	(Amt. dep.)	Amt. app.	Pres. value.
Structure					
Excavation	\$10,646.28	.....	\$3,298.64	.....	.....
Eng. & Supt.	2,690.80	.....	.....	\$684.00	.....
	1,333.72	.....	.....	.....	.....
	<u>\$14,670.80</u>	.....	<u>\$3,298.64</u>	<u>\$684.00</u>	<u>\$12,056.16</u>

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Present value.
467-42	Outlet	\$263.39	20	\$52.68	.....
470-00	"	246.40	20	49.28	.....
479-64	"	246.40	20	49.28	.....
479-64	"	246.40	20	49.28	.....
479-86	Stop gate	727.32	30	218.20	.....
481-60	Outlet	41.00	20	8.20	.....
492-85	Bridge	251.68	50	125.84	.....
493-06	Outlet	246.40	20	49.28	.....
496-84	"	52.00	20	10.40	.....
499-24	"	474.76	40	189.90	.....
501-50	"	727.32	40	290.93	.....
501-81	"	52.00	20	10.40	.....
501-90	"	41.00	20	8.20	.....
505-97	"	246.40	20	49.28	.....
505-97	"	52.00	20	10.40	.....

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Present value.
512-37	"	41.00	20	8.20	.....
514-97	"	41.00	20	8.20	.....
519-05	"	246.40	20	49.28	.....
519-20	"	52.00	20	10.40	.....
523-60	"	41.00	20	8.20	.....
525-64	Bridge	250.00	20	50.00	.....
528-22	Outlet	263.39	20	52.68	.....
531-77	"	246.40	20	49.28	.....
538-87	"	263.39	20	52.68	.....
540-05	Stop gate	727.32	20	145.46	.....
546-51	Outlet	41.00	20	8.20	.....
552-48	"	246.40	20	49.28	.....
555-10	"	41.00	20	8.20	.....
559-45	"	52.00	20	10.40	.....
561-33	Pipe-box	600.00	20	120.00	.....
566-15	Outlet	263.39	20	52.68	.....
569-31	"	246.40	20	49.28	.....
570-85	Head Gate # 4	337.79	40	135.11	.....
574-57	Outlet	263.39	20	52.68	.....
756-55	"	246.40	20	49.28	.....
579-29	Bridge	317.31	50	158.66	.....
581-70	Outlet	290.02	20	58.00	.....
584-55	Waste Gate	1,119.81	40	447.92	.....
	Measuring	495.00	10	49.50	.....
	Gates.....	\$10,649.28	.....	\$3,298.64	.....

Colony Canal Extension.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	(Amt. app.)	Pres. value.
Structures	\$9,251.47		\$1,898.45		
Earth exca.....	6,811.20				
Eng. & Supt.....	1,606.26			\$1,730.00	
Total.....	\$17,668.93		\$1,898.45	\$1,730.00	\$17,500.48

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	Amt. dep.	Pres. value.
586-31	Outlet	\$60.50	20	\$12.10	
590-85	"	52.00	20	10.40	
594-93	Stop gate	604.34	20	241.74	
600-25	Outlet	41.00		8.20	
602-27	"	41.00		8.20	
607-85	"	41.00		8.20	
608-65	Pipe Box	400.00		80.00	
611-19	Outlet	60.50		12.10	
613-15	"	52.00		10.40	
618-72	"	60.50		12.10	
627-17	"	60.50		12.10	
627-75	"	52.00		10.40	
634-27	"	41.00		8.20	
637-55	"	41.00		8.20	
643-63	"	41.00		8.20	
646-52	"	41.00		8.20	

Sta.	Description.	Cost	% dep.	Amt. dep.	Pres. value.
650-00	"	90.20	..	18.04	.....
650-62	"	41.00	..	8.20	.....
651-03	Stop Gate	727.32	..	145.46	.....
656-95	Outlet	41.00	..	8.20	.....
658-95	"	41.00	..	8.20	.....
659-55	Bridge	200.00	..	40.00	.....
660-98	Outlet	41.00	..	8.20	.....
663-62	Bridge	200.08	..	100.04	.....
664-60	Outlet	41.00	..	8.20	.....
667-68	"	75.00	..	15.00	.....
668-26	"	60.50	..	12.10	.....
668-98	Stop Gate	727.32	..	72.73	.....
675-00	Outlet	41.00	..	8.20	.....
676-38	Outlet	52.00	..	10.40	.....
678-07	"	75.00	..	15.00	.....
678-76	Stop Gate	604.34	..	120.87	.....
683-13	Outlet	75.00	..	15.00	.....
683-75	"	60.50	..	12.10	.....
686-79	Outlet	75.00	..	15.00	.....
689-55	"	75.00	..	15.00	.....
694-91	"	60.50	..	12.10	.....
696-00	"	60.50	..	12.10	.....
696-73	Stop Gate	727.32	..	145.46	.....
703-06	Outlet	41.00	..	8.20	.....
706-79	"	75.00	..	15.00	.....
709-74	Outlet	41.00	..	8.20	.....
711-13	"	41.00	..	8.20	.....
717-20	"	41.00	..	8.20	.....
719-91	Bridge	200.00	..	40.00	.....

721-00	Outlet				
723-39	"	\$60.50	20	12.10	.....
723-57	"	60.50	20	12.10	.....
724-32	Stop Gate	225.00	20	45.00	.....
730-30	Outlet	604.34	20	120.87	.....
733-91	"	52.00	20	10.40	.....
736-60	"	52.00	20	10.40	.....
738-91	"	60.50	20	12.10	.....
741-05	"	52.00	20	10.40	.....
745-16	Pipe Box	60.50	20	12.10	.....
748-22	Outlet	400.00	20	80.00	.....
750-09	"	52.00	20	10.40	.....
752-00	"	60.50	20	12.10	.....
754-14	Stop gate	52.00	20	10.40
	Meas. Gates	539.71	20	107.94
		600.00	10	60.00
		<u>\$8,251.47</u>		<u>\$1,898.45</u>

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Merced County.

Colony Canal Branch # 1.

Summary.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	(Amt. app.)	Pres. value.
Structures	\$944.75	.....	\$281.58	.....	.....
Excavation	4,922.00	.....	.....	\$1,250.00	.....
Eng. & Supt.	586.67	.....	.....	.....	.....
Total	\$6,453.42	.....	\$281.58	\$1,250.00	\$7,421.84

Detail List of Structures.

Sta	Description.	Cost.	% dep.	(Amt. dep.)	Present value.
152-01	Bridge	\$114.77	50%	\$57.39	.....
152-33	Outlet	223.08	20%	44.62
153-30	"	25.00	20%	5.00
153-26	Stop gates	581.90	30	174.57
Total	\$944.75	\$281.58

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Merced County.

Colony Canal Branch # 2.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Structure	\$6,966.10	.....	\$1,901.82	.....	.....
Excavation	5,093.20	.....	.....	\$1,300.00	.....
Eng. & Supt.	1,205.93	.....	.....	.....	.....
Total	\$13,265.23	.....	\$1,901.82	\$1,300.00	\$12,663.41

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Present value.
56-24	Outlet	\$87.78	20%	\$17.56	.....
56-35	"	87.78	20	17.56	.....
58-00	"	70.00	20	14.00	.....
58-08	Bridge	144.90	40	57.96	.....
58-40	Outlet	87.78	20	17.56	.....
59-03	"	25.00	20	5.00	.....
59-36	Stop Gate	467.94	30	140.38	.....
74-20	Outlet	87.78	20	17.56	.....
74-31	"	87.78	20	17.56	.....
74-59	"	87.78	20	17.56	.....
74-87	Stop Gate	467.94	40	187.18	.....
75-39	Outlet	184.80	20	36.96	.....
81-10	"	30.00	20	6.00	.....
86-64	"	30.00	20	6.00	.....
88-52	Bridge	175.00	40	70.00	.....
88-93	Outlet	184.80	20	36.96	.....
90-25	"	30.00	20	6.00	.....
90-38	Stop Gate	467.94	30	140.38	.....
95-12	Outlet	30.00	20	6.00	.....
108-14	"	30.00	20	6.00	.....
11-30	"	30.00	20	6.00	.....
114-80	"	30.00	20	6.00	.....
114-98	Bridge	144.90	40	57.96	.....
115-27	Outlet	25.00	20	5.00	.....
114-37	"	184.80	20	36.96	.....
115-37	"	184.80	20	36.96	.....

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Present value.
115-94	Outlet	20.00	20	4.00	.....
116-10	Stop Gate	467.94	30	140.38	.....
122-58	Outlet	25.00	20	5.00	.....
128-23	"	184.80	20	36.96	.....
141-10	"	184.80	20	36.96	.....
141-45	Bridge	144.90	40	57.96	.....
142-13	Stop Gate	467.94	30	140.38	.....
167-54	Outlet	184.80	20	36.96	.....
169-88	Stop Gate	467.94	30	140.38	.....
192-23	"	467.94	30	140.38	.....
193-43	Outlet	72.60	20	14.52	.....
235-00	Stop gate	467.94	30	140.38
	Meas. Gates	345.00	10	34.50
Total		\$6,966.10	\$1,901.82

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Merced County.

Colony Canal Branch # 3.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	(Amt. dep.)	Pres. value.
Structures	\$8,930.53	.....	\$2,193.78	.....	.....
Excavation	4,685.68	.....	.....	\$1,200.00	.....
Eng. & Supt.	1,361.62	.....	.....	.....	.....
Total	\$14,977.83	.....	\$2,193.78	\$1,200.00	\$13,984.05

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Present value.
6-86	Outlet	\$105.71	20	\$21.14	.....
7-07	Outlet	52.00	20	10.40	.....
7-15	"	105.71	20	21.14	.....
11-42	"	105.71	20	21.14	.....
15-00	"	105.71	20	21.14	.....
18-77	"	105.71	20	21.14	.....
22-97	"	105.71	20	21.14	.....
25-42	Bridge	52.00	20	10.40	.....
25-81	Outlet	196.56	40	78.62	.....
26-09	Stop Gate	105.71	20	21.14	.....
30-00	Outlet	533.22	30	159.97	.....
39-00	Outlet	105.71	20	21.14	.....
41-50	Outlet	28.60	20	5.72	.....
43-50	"	52.00	20	10.40	.....
46-50	"	105.71	20	21.14	.....
48-51	"	41.00	20	8.20	.....
51-31	"	41.00	20	8.20	.....
52-43	Bridge	119.73	20	23.95	.....
52-70	Outlet	196.56	40	78.62	.....
53-61	"	119.73	20	23.95	.....
53-91	Stop gate	105.71	20	21.14	.....
62-08	Outlet	476.74	30	143.02	.....
67-53	"	41.00	20	8.20	.....
76-41	"	52.00	20	10.40	.....
77-55	"	52.00	20	10.40	.....
77-55	"	68.53	20	13.71	.....
82-48	Outlet	68.53	20	13.71	.....
87-71	"	52.00	20	10.40	.....
		52.00	20	10.40	.....

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Present. value.
90-56	Bridge	148.05	40	59.22	.....
96-00	Outlet	218.74	20	43.75	.....
103-07	Outlet	218.74	20	43.75	.....
104-56	Bridge	148.05	40	59.22	.....
109-74	Outlet	52.00	20	10.40	.....
111-25	"	25.00	20	5.00	.....
113-22	Stop gate	476.74	30	143.02	.....
118-24	Outlet	218.74	20	43.75	.....
131-44	"	296.32	20	59.26	.....
132-11	Stop gate	476.74	30	143.02	.....
136-24	Outlet	41.00	20	8.20	.....
142-32	"	41.00	20	8.20	.....
145-71	"	41.00	20	8.20	.....
153-81	"	52.00	20	10.40	.....
156-00	"	52.00	20	10.40	.....
157-30	"	296.32	20	59.26	.....
167-72	"	35.00	20	7.00	.....
171-00	"	369.82	20	73.96	.....
171-64	Stop gate	476.74	30	143.02	.....
1682					
176-39	Pipe box	250.00	30	75.00	.....
178-79	Outlet	105.71	20	21.14	.....
183-91	Bridge	150.25	40	60.10	.....
184-31	Outlet	200.00	20	40.00	.....
184-40	"	218.74	20	43.75	.....
185-80	"	41.00	20	8.20	.....
187-19	Stop gate	476.74	30	143.02	.....
	Meas. Gates	557.50	10	55.75	.....
Total		\$8,930.53	....	\$2,193.78	.....

Colony Canal Branch 4.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Structures	\$7,120.05	.....	\$1,873.05	.....	.....
Exc.	1,354.08	.....	.....	\$345.00	.....
Eng. & Supt.	847.41	.....	.....	.....	.....
	<u>\$9,321.54</u>	.....	<u>\$1,873.05</u>	<u>\$345.00</u>	<u>\$7,798.49</u>

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	Amt. dep.	Pres. value.
3-23	Outlet	\$41.00	20	\$8.20	.....
3-83	"	41.00	20	8.20	.....
7-76	"	41.00	20	8.20	.....
10-28	"	41.00	20	8.20	.....
11-79	"	41.00	20	8.20	.....
11-90	"	41.00	20	8.20	.....
14-19	"	41.00	20	8.20	.....
14-00	Stop gate	41.00	20	8.20	.....
20-14	Outlet	363.80	30	109.14	.....
20-30	Bridge	41.00	20	8.20	.....
21-04	Outlet	109.20	40	43.68	.....
21-36	"	52.00	20	10.40	.....
24-89	"	41.00	20	8.20	.....
27-20	"	52.00	20	10.40	.....
20-30	Bridge	41.00	20	8.20	.....
30-60	Outlet	109.20	40	43.68	.....
33-00	"	87.80	20	17.56	.....
	.....	87.80	20	17.56	.....

Sta.	Description.	Cost.	% dep.	Amt. dep.	Pres. value.
35-72	"	41.00	20	8.20	.....
36-86	Bridge	175.35	40	70.14	.....
37-17	Outlet	87.80	20	17.56	.....
37-66	"	41.00	20	8.20	.....
37-96	Stop gate	363.80	30	109.14	.....
44-33	Outlet	41.00	20	8.20	.....
54-75	"	41.00	20	8.20	.....
55-00	"	150.00	20	30.00	.....
57-61	"	41.00	20	8.20	.....
58-90	"	150.00	20	30.00	.....
59-44	Stop gate	363.80	30	109.14	.....
65-90	Bridge	130.00	40	52.00	.....
66-24	Outlet	250.00	20	50.00	.....
69-50	"	41.00	20	8.20	.....
69-83	"	25.00	20	5.00	.....
70-00	Bridge	130.00	40	52.00	.....
72-41	Outlet	41.00	20	8.20	.....
75-87	"	200.00	20	40.00	.....
76-01	"	41.00	20	8.20	.....
76-61	Stop gate	363.80	30	109.14	.....
81-46	Outlet	41.00	20	8.20	.....
84-08	"	41.00	20	8.20	.....
88-12	"	41.00	20	8.20	.....
88-25	"	150.00	20	30.00	.....
91-45	"	41.00	20	8.20	.....
91-85	"	41.00	20	8.20	.....
92-04	Stop gate	363.80	30	109.14	.....
95-50	Outlet	41.00	20	8.20	.....
96-18	"	41.00	20	8.20	.....

97-79	.....	41.00	20	8.20	.....
1684					
102-37	Bridge	125.00	40	50.00	.....
102-53	Outlet	41.00	20	8.20	.....
102-77	"	150.00	20	30.00	.....
105-45	"	41.00	20	8.20	.....
110-09	"	41.00	20	8.20	.....
110-19	"	41.00	20	8.20	.....
116-95	"	41.00	20	8.20	.....
117-00	"	180.00	20	36.00	.....
121-59	Stop gate	363.80	30	109.14	.....
122-60	Outlet	41.00	20	8.20	.....
124-92	"	41.00	20	8.20	.....
125-00	"	41.00	20	8.20	.....
127-22	"	52.00	20	10.40	.....
130-55	Bridge	120.00	40	48.00	.....
133-00	Outlet	25.00	20	5.00	.....
136-00	Stop gate	363.80	30	109.14	.....
153-54	"	363.80	30	109.14	.....
	Measuring gates	217.50	10	21.75	.....
Total	.....	\$7,120.05	....	\$1,873.05	.....

Merced Co.

1182

THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

Outside Canal.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Structures					
Excavation	\$29,914.52	.....	\$7,123.56	.....	.....
Side Canal	44,522.50	.....	.....	.....	.....
Eng. & Supt.	4,396.00	.....	.....	\$11,350.00	.....
	7,883.30	.....	.....	.....	.....
	<u>\$86,716.32</u>	.....	<u>\$7,123.56</u>	<u>\$11,350.00</u>	<u>\$90,942.76</u>

Detail List of Structures.

Sta.	Description.	Cost	% dep.	Amt. dep.	Pres. value.
1024-49	Br.	\$315.63	30	\$94.69	.....
1024-49	" s.	46.72	30	14.02	.....
1105-50	Stop gates	159.31	20	31.86	.....
1106-07	Outlet	384.91	10	38.49	.....
1106-07	Bulkheads	86.56	20	17.31	.....
1106-50	Stop gates	159.31	20	31.86	.....
1107-65	"	975.87	40	390.35	.....
1222-00	"	159.31	20	31.86	.....
1226-02	Outlet	159.31	20	31.86	.....
1226-02	Bulkheads	384.91	10	38.49	.....
1227-00	Stop gates	86.56	40	34.62	.....
1227-49	"	159.31	20	31.86	.....
1296-00	"	975.87	40	390.35	.....
1297-00	"	159.31	20	31.86	.....
1297-00	"	159.31	20	31.86	.....

1341-84	Outlet	384.91	10	38.49	.....
1368-89	Bridge	315.63	40	126.25	.....
1368-89	" s.	46.72	40	18.69	.....
1392-00	Stop gates	159.31	20	31.86	.....
1392-76	Outlet	418.12	10	41.81	.....
1392-76	Bulkhead	86.56	40	34.62	.....
1394-32	Stop gate	975.87	40	390.35	.....
1408-00	" s.	159.31	20	31.86	.....
1442-00	" s.	159.31	20	31.86	.....
1459-75	Outlet	384.91	10	38.49	.....
1475-50	"	384.91	40	153.96	.....
1482-00	Stop gate	159.31	20	31.86	.....
1490-97	Bridge	600.51	20	120.10	.....
1490-97	" s.	46.72	20	9.35	.....
1521-00	Stop gates	159.31	20	31.86	.....
1532-30	Outlet	384.91	10	38.49	.....
1532-52	"	418.12	10	41.81	.....
1532-58	Bulkhead	86.56	40	34.62	.....
1534-23	Stop gate	975.87	30	292.76	.....
1543-50	" s.	159.31	20	31.86	.....
1552-00	" s.	159.31	20	31.86	.....
1569-82	Bridge	600.51	20	120.10	.....
1575-00	Stop gates	159.31	20	31.86	.....
1607-61	Bridge	747.60	30	224.28	.....
1607-61	Stop gates	159.31	20	31.86	.....
1607-61	Bridges	46.72	20	9.35	.....
1615-00	Stop gates	159.31	20	31.86	.....
1628-00	" s.	159.31	20	31.86	.....
1659-29	Outlet	418.12	10	41.81	.....
1659-29	Bulkheads	86.56	40	34.62	.....

Sta.	Description.	Cost	% dep.	Amt. dep.	Pres. value.
1659-29	Stop gates	159.31	20	31.86	.....
1686					
1660-00	Stop gates	159.31	20	31.86	.....
1660-53	"	975.87	30	292.76	.....
1701-64	Outlet	384.91	20	76.98	.....
1729-00	Stop gates	159.31	20	31.86	.....
1729-56	Bridge	747.60	60	448.56	.....
1729-56	Bridge s.	46.72	60	28.03	.....
1744-72	Outlet	402.65	10	40.27	.....
1780-00	Stop gates	159.31	20	31.86	.....
1794-20	Outlet	402.65	10	40.27	.....
1795-30	Stop gate	1,079.05	40	431.62	.....
1799-28	Waste gate	4,673.68	20	934.73	.....
1799-28	"	5,641.02	20	1,128.20	.....
	Gates on side canal	875.00	20	175.00	.....
	Measuring gates	673.00	10	67.30	.....
		\$29,914.52	....	\$7,123.56	.....

1687

Merced County.

Outside Canal Extension.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Structure	\$22,360.48	.....	\$4,427.79	.....	.....
Excavation	45,665.50	.....	.....	\$11,600.00	.....
Eng. & Supt.	6,802.59	.....	.....	.....	.....
Total	\$74,828.57	.....	\$4,427.79	\$11,600.00	\$82,000.78

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Pres. value.
1800-31	Stop gate	\$1,172.60	30	\$351.78	.....
1803-03	Bridge	392.28	20	78.46	.....
1823-05	Outlet	371.30	10	37.13	.....
1832-09	Bridge	715.05	10	71.51	.....
1852-65	Outlet	371.30	10	37.13	.....
1899-92	Bridge	575.29	30	172.59	.....
1915-73	Outlet	371.30	10	37.13	.....
1916-23	Bridge	715.05	30	214.52	.....
1955-22	Outlet	371.30	5	18.57	.....
1977-61	Bridge	715.05	30	214.52	.....
2039-84	Headgate	1,074.83	20	214.97	.....
2065-52	Bridge	392.28	30	117.68	.....
2066-63	Outlet	371.30	5	18.56	.....
2039-71	Stop gate	727.32	20	145.46	.....
2137-18	Outlet (2)	371.30	10	37.13	.....
2155-84	Bridge	308.49	50	154.25	.....
2176-30	Outlet	371.30	10	37.13	.....
2211-50	"	250.00	10	25.00	.....
2236-76	Bridge	575.29	30	172.59	.....
2242-61	Outlet	371.30	10	37.13	.....
2259-89	Stop gate	727.32	10	72.73	.....
2262-79	Waste Gate	1,075.71	30	322.71	.....
2270-20	Outlet	371.30	10	37.15	.....
2271-07	Stop gate	727.32	10	72.73	.....
2338-57	Outlet	371.30	10	37.13	.....
2351-91	Bridge	715.05	30	214.52	.....
2362-44	Outlet	371.30	10	37.13	.....

Sta.	Description.	Cost.	% dep.	(Amt. dep.)	Pres. value.
2386-25	Outlet	371.30	10	37.13	.....
2386-98	Stop gate	727.32	10	72.73	.....
2408-13	Outlet	371.30	10	37.13	.....
2451-47	"	371.30	10	37.13	.....
2461-50	Bridge	575.29	40	230.12	.....
2491-28	Outlet	371.30	10	37.13	.....
2522-26	"	371.30	10	37.13	.....
2522-95	Bridge	575.29	40	230.12	.....
2523-86	Head gate	827.22	40	330.89	.....
2536-04	Outlet	371.30	10	37.13	.....
2537-45	Stop gate	727.32	10	72.73	.....
2881-31	"	527.01	30	158.10	.....
	Meas. Gates	1,230.00	10	123.00	.....
		<u>\$22,360.48</u>	....	<u>\$4,427.79</u>	.....

1688

Merced County.

Outlet Canal # 4.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Drops	\$2,587.20	30%	\$721.56	.....	.....
Excavation	489.44	.....	.....	\$125.00	.....
Eng. & Supt.	307.66	.....	.....	.....	.....
Total	<u>\$3,384.30</u>	.....	<u>\$721.56</u>	<u>\$125.00</u>	<u>\$2,787.74</u>

Outlet Canal # 5.

Item.	Cost (Goodwin).	% dep.	Amt. dep.	Amt. app.	Pres. value.
Drops		20%			
Excavation	\$5,256.02		\$1,051.20		
Eng. & Supt.	1,856.00			\$472.00	
	711.20				
	<u>\$7,823.22</u>		<u>\$1,051.20</u>	<u>\$472.00</u>	<u>\$7,244.02</u>

1689

Stanislaus County.

Main Canal Extension "A."

Item.	Cost (Goodwin).	% dep.	Amt. dep.	(Amt. app.)	Pres. value.
Structures					
Excavation	\$12,902.98		\$3,949.77		
Tele. Line	23,250.40				
Eng. & Supt.	541.10	20%	108.22	\$5,670.00	
	3,639.44				
	<u>\$40,363.92</u>		<u>\$4,057.99</u>	<u>\$5,670.00</u>	<u>\$41,975.93</u>

Detail List of Structures.

Sta.	Description.	Cost.	% dep.	Amt. dep.	Present value.
3135-62	Bridge	\$310.17	40	\$124.07	
3135-78	Outlet	109.17	10	10.92	
3144-28	"	109.17	10	10.92	
3155-09	"	224.51	10	22.45	
3155-62	Bridge	421.05	40	168.42	
3158-40	Outlet	98.28	10	9.83	

Sta.	Description.	Cost.	sq. dep.	Amt. dep.	Present value.
3170-30	"	98.28	10	9.83	.....
3178-60	"	224.51	10	22.45	.....
3179-17	Stop Gate	937.28	60	562.37	.....
3197-61	Outlet	224.51	10	22.45	.....
3191-98	Inlet	224.51	80	179.61	.....
3202-31	Outlet	109.17	10	10.92	.....
3218-06	"	50.00	10	5.00	.....
3223-67	"	98.28	10	9.83	.....
3237-08	"	224.51	10	22.45	.....
3251-89	Bridge	344.82	80	275.86	.....
3252-43	Outlet	98.28	10	9.83	.....
3253-69	Bridge	367.71	20	73.54	.....
3277-69	Outlet	224.51	10	22.45	.....
3283-77	"	224.51	10	22.45	.....
3292-63	Bridge	320.25	80	256.20	.....
3301-97	Outlet	90.00	10	9.00	.....
3302-64	Stop gate	840.23	20	168.05	.....
3316-67	Outlet	75.00	10	7.50	.....
3330-80	"	224.51	10	22.45	.....
3356-20	"	224.51	10	22.45	.....
3361-57	"	75.00	10	7.50	.....
3366-38	"	224.51	10	22.45	.....
3378-22	Bridge	376.95	20	75.39	.....
3393-00	Outlet	75.00	10	7.50	.....
3409-20	Inlet	75.00	50	37.50	.....
3409-25	Outlet	224.51	10	22.45	.....
3409-72	Stop gate	826.21	50	41.31	.....
3432-02	Bridge	345.45	50	172.73	.....
3432-40	Outlet	109.17	10	10.92	.....

3438-90	.....	98.28	10	9.83	.....
3452-30	.....	224.51	10	22.45	.....
3465-46	.....	98.28	10	9.83	.....
3473-61	.....	98.28	10	9.83	.....
3480-00	.....	98.28	10	9.83	.....
3489-06	.....	98.28	10	9.83	.....
3489-33	.....	98.28	10	9.83	.....
3501-70	Bridge	290.85	50	145.43	.....
3509-35	Outlet	98.28	10	9.83	.....
3509-75	Inlet	224.51	20	44.90	.....
1690	Outlet	224.51	10	22.45	.....
3520-05	Outlet	.....	.....	.....	.....
3533-39	Inlet	\$98.28	10	9.83	.....
3539-85	Inlet	85.00	20	17.00	.....
3540-50	Waste gate	224.51	20	44.90	.....
	Meas. Gate	1,276.60	80	1,021.28	.....
		835.00	10	83.50	.....
		<u>\$12,902.98</u>		<u>\$3,949.77</u>	
1691		.....	.....	.....	.....
Stanislaus County.					
Main Canal Extension "R."					
Structures	Item.	Cost (Goodwin).	% dep.	Amt. dep.	Pres. value.
Excavation	.....	\$12,354.04	.....	\$4,146.57	.....
Line	.....	13,835.40	.....	.....	.....
Eng. & Supt.	.....	289.10	20%	57.82	.....
	.....	2,618.96	.....	.....	.....
Total	.....	<u>\$29,097.50</u>	.....	<u>\$4,204.39</u>	<u>\$3,540.00</u>
					<u>\$28,433.11</u>

Detail List of Structures.

Sta	Description.	Cost.	% dep.	(Amt. dep.)	Pres. value.
3556-40	Stop gate	\$2,034.07	60%	\$1,220.44	.....
3557-25	Waste Gate	3,000.00	20	600.00	.....
3558-13	Stop gate	2,034.07	60	1,220.44	.....
3590-25	Bridge	271.11	30	81.33	.....
3592-33	Outlet	224.51	10	22.45	.....
3600-00	Outlet	75.00	10	7.50	.....
3602-99	Outlet	136.40	10	13.64	.....
3603-18	Outlet	136.40	10	13.64	.....
3605-57	Outlet	224.51	10	22.45	.....
3613-85	Outlet	101.20	10	10.12	.....
3624-73	"	101.20	10	10.12	.....
3633-01	Bridge	313.53	30	94.06	.....
3645-34	Outlet	101.20	10	10.12	.....
3649-66	Outlet	101.20	10	10.12	.....
3653-50	Bridge	500.00	30	150.00	.....
3661-88	Outlet	101.20	10	10.12	.....
3666-38	"	65.00	10	6.50	.....
3677-68	"	224.51	10	22.45	.....
3689-76	"	224.51	10	22.45	.....
3696-18	"	101.20	10	10.12	.....
3696-62	Stop gate	525.47	70	367.83	.....
3710-27	Outlet	224.51	10	22.45	.....
3727-65	"	224.51	10	22.45	.....
3743-86	"	101.20	10	10.12	.....
3755-09	"	224.51	10	22.45	.....
3755-19	Outlet	224.51	10	22.45	.....

3755-39	Waste gate	224.51	10	67.35	.....
	Mens. Gates	534.00	10	53.40	.....
	Total	\$12,354.04	....	\$4,146.57	.....

1692

Stanislaus County.

Oristimba Branch Canal.

Item.	Cost.	% dep.	Amt. dep.	Amt. app.	Pres. value.
6 stop gates @ \$150	\$900.00	30%	\$270.00	.....	.....
7 outlet gates @ \$35	245.00	30%	73.50	.....	.....
Flume	1,174.20	50%	587.10	.....	.....
Earth Excavation	770.00	.....	.....	\$190.00	.....
Eng. & Supt.	231.80	.....	.....	.....	.....
Total	\$3,321.00	.....	\$930.60	\$190.00	\$2,580.40

Endorsed: Complainant's Exhibit No. 26. E. H. H., Master, etc. Filed May 14, 1910. Southard Hoffman, clerk, by J. A. Schaertzer, Deputy clerk.

1693

COMPLAINANT'S EXHIBIT 27.

W. C. H./2.

OCTOBER 9TH, '8.

San Joaquin & Kings River Canal & Irrigation Company, Incorporated, Office.

GENTLEMEN: I beg to hand you herewith computation of Miller & Lux Irrigation from the canal during the fiscal year 1907-08, showing also the method of arriving at the results below given.

The total Miller & Lux land irrigated from the canal was 58,912.9 acres, of which 48,926.44 acres were irrigated from the Main Canal and its branches. For the irrigation of this land 62,429.61 second feet were carried for twenty-four hours, making 1,276 second feet for twenty-four hours per acre.

In Fresno County 28,571.3 acres were irrigated, which at the rate above mentioned would take 36,456.93 second feet for twenty-four hours, or 57.9 per cent. of the whole amount.

In Merced County 20,355.1 acres were irrigated, which at the same rate would require 25,973.11 second feet for twenty-four hours, or 42.1 per cent of the whole.

In Stanislaus County 20 acres were irrigated.

The excess over 760 second feet in the canal irrigating Miller & Lux lands was 35,994.69 second feet, leaving 26,435.92 second feet of the water which went on Miller & Lux lands taken from the 760 second feet allowed the Canal Company for non-riparian 1694 lands.

The following land consequently was irrigated from the 700 feet belonging to the Canal Company:

In Fresno County: 57.9 per cent of 26,435.92 second feet equals 15,306.40 second feet, which at the rate of 1,276 second feet per acre would irrigate 11,995.61 acres.

In Merced County: 42.1 per cent of 26,435.92 second feet equals 11,125.97 second feet, at 1,276 second feet per acre would irrigate 8,719.41 acres.

The balance was irrigated from excess water as follows:

Fresno County, 16,576.69 acres

Merced County, 11,635.69 "

The total amount of riparian land, which was irrigated for Miller & Lux during the season 1907-08, was 12,058.8 in Fresno County, or 42.2 per cent of the whole, and 12,232.5 in Merced County, or 60.1% of the whole; consequently the portion of the excess land irrigated, which was riparian, was as follows:

In Fresno County: 42.2% of 16,576.69 equals 6994.94 acres.

In Merced County: 60.1% of 11,635.69 equals 6993.04 acres.

This leaves a balance of non-riparian Miller & Lux land irrigated from the excess water carried in the Canal, for which the Canal Company has no right to collect, of 9580.75 acres in Fresno County, and 4,642.65 acres in Merced County, for which 12,171.04 second feet of water were used in Fresno County, and 5,924.02 second feet were used in Merced County, and this is the amount for which car-

riage may be charged for 3.2 miles from the inlet gate of the Helm Canal to the head of the Poso Canal, where this water was delivered again to Miller & Lux. This water was carried for Miller & Lux for the reason that the Helm Canal is out of commission for these three miles, and would have required some trouble and expense to repair in order to carry this amount of water.

This makes the total Miller & Lux account as follows:

Land Irrigated by Canal Company.

Fresno County:

Main Canal.....	11995.61	acres
Outside Canal.....	5544.40	"
Excess water on riparian lands under Main Canal..	6994.94	"
Total.....	24,534.95	"

@ 85¢ equals \$20854.71.

Merced County:

Main Canal.....	8719.41	acres
Riparian lands under Main Canal irrigated with excess water.....	6993.04	"
	15,712.45	"

The total acres irrigated for two crops was 7189.5, being 35.3 per cent of the total irrigated in Merced County. Consequently 64.7 per cent of 15,712.45 acres, or 10,165.96 acres are chargeable at the rate of \$1.25 per acre equals \$12,707.45.

Land chargeable at \$1.65 per acre is as follows:

4442.10 acres under Outside Canal	
5546.49 " of two crop irrigation under Main Canal	
Total 9988.59 " equals \$16,481.17.	

Stanislaus County:

20 acres were irrigated at \$1.50 equals \$30.00.

Carrying charge 18,095.06 second feet 3.2 miles equals 57,904.19 second feet miles @ 1½¢ per second foot mile equals \$289.52.

Summary.

Fresno County.....	24,534.95 acres.....	\$20,854.71
Merced County.....	9,988.59 ".....	16,481.17
" ".....	10,165.96 ".....	12,707.45
Stanislaus County.....	20 ".....	30.00
Water carried for Miller & Lux	57,904.19 second foot	
miles		289.52
Total.....		\$50,362.85

Yours truly,

W. C. HAMMATT.

1696

OCTOBER 30, '8.

S. J. & K. R. C. & I. Co., Inc., San Francisco.

GENTLEMEN: I hand you herewith revised report of Miller & Lux Irrigation for 1907-08. The method of obtaining it corresponds to that used in the previous report, the results merely being revised on account of certain errors found in the irrigation acreages previously reported. This is now segregated by farm.

Yours truly,

W. C. HAMMATT.

W. C. H./D.

1697

Miller & Lux Water Bill.

1907-8.

Total land irrigated with 760 second feet—

11995.61 acres in Fresno Co.

8719.41 " " Merced "

Total Riparian Lands Irrigated from excess water—

Fresno Co. 41.4% of 16575.69 equals 6862.34 acres.

Merced "

1 crop..... 39.8% of 11635.69 " 4631.00 "

2 crops..... 22.4% of 11635.69 " 2606.39 "

Balance—N. R. lands Irrigated from excess water—

Fresno Co.—9713.35 acres distributed as follows:

Poso Farm..... 30.6% equals 2972.26 acres

Colony " 1.1% " 109.05 "

Dos Palos " 68.3% " 6632.02 "

Merced Co. 2893.14 acres irrigated for 1 crop distributed as follows:

Dos Palos Farm..... 45.5% equals 1316.38 acres

Los Banos " 54.5% " 1576.76 "

Also 1505.16 acres irrigated for 2 crops distributed as follows:

Colony Farm..... 12.9% equals 194.17 acres

Los Banos " 87.1% " 1310.99 "

Summary.

Los Ba-os Farm:

Stanislaus Co.	20 acres 1 crop @ 1.25 equals.	\$25.00
Merced Co. 4940.30 acres		
less	1576.76 "	

	3363.54 "	1 crop @ 1.25 equals.	4204.43
	7290.60 "		
less	1310.99 "		

	5979.61 "	2 crops @ 1.65 "	9866.36
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Also 2887.75 acres N. R. land irrigated from			
3644.77 second feet carried 25 miles equals			
91119.25 s. f. m @ \$0.001½			455.60

Total		14551.39
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Santa Rita Farm:

Merced Co. 1254.30 acres @ 1.25 equals.	1567.87
418.10 " @ 1.65 "	689.87

Total	2257.74
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1698

Colony Farm:

Merced Co. 2958.00 acres @ 1.25 equals.	\$3697.50
3282.20 "	
less 194.17 "	

3088.03 " @ 1.65 "	5095.25
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Fresno Co. 1206.70 "	
Less 109.05 "	

1097.65 " @ .85 "	933.16
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Also 109.05 acres N. R. land irrigated from 139.15 sec.
ft. water carried 3.2 miles equals 445.28 s. f. m.

And 194.17 acres N. R. land irrigated from 247.76 ft.
water carried 23 miles equals 5698.48 s. f. m.

Total 6143.76 S. F. M. @ 0.001½ equals.	30.72
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Total	\$9756.63
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Dos Palos Farm:

Merced Co. 2319.20 acres	
less 1316.38 "	

1002.82 "	@ 1.25 equals.	1253.52
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Fresno Co. 17464.30 "	
less 6632.02 "	

10832.28 " @ .85 "	9207.44
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1196 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

Also 6632.02 acres irrigated from 8462.46 sec. ft. water
carried 3.2 miles equals 27079.87 s. f. m. and 1316.38
acres irrigated from 1679.70 sec. ft. water carried 17
miles equals 28554.90 s. f. m.
Total 55634.77 s. f. m. @ 0.00½ equals..... 278.17
Total \$10739.13

Poso Farm:

Merced Co. 1693.80 acres @ 1.25 equals..... 2117.25
640.70 " " 1.65 " 1057.15
Fresno Co. 15444.70 " "
less 2972.28
12472.42 " " .85 " 10601.56

Also 2972.28 acres N. R. land irrigated from 3792.63 sec.
ft. water carried 3.2 miles 12136.42 s. f. m. @ 0.00½
equals 60.68
Total \$13836.64

Total M. & L. Bill.

1907-8.

Los Banos Farm..... 14551.39
Santa Rita " 2257.74
Colony " 9756.63
Dos Palos " 10739.13
Poso " 13836.64
Total 51141.53

1699

Total Acreage.

	Irrigated.	M. & L. Water carriage.	Total.
Los Banos Farm.....	9383.15	2887.75	12270.90
Santa Rita "	1672.40	.....	1672.40
Colony "	7143.68	303.22	7446.90
Dos Palos "	11835.10	7948.40	19783.50
Poso "	14806.92	2972.28	17779.20
Total	44841.25	14111.65	58952.90

1700 The following proportion of the maintenance of the head-
works is to be borne by Miller & Lux for 1907-8:

Land Irrigated by Canal Co.

Miller & Lux 44,841.25 — @ 1.276 equals 57,217.43
Consumers 34,050.70 acres @ 1.223 equals 41,661.32
Total second feet equals 98,878.75

Land Irrigated by M. & L.

14,111.65 acres @ 1.276 equals 18,006.46.

Proportion of charge to be borne by M. & L. $18,006.46/116,885.21$ equals 15.4%.

15.4% of \$2,200 equals \$338.80.

1701

NOVEMBER 2D, '8.

The San Joaquin & Kings River Canal & Irrigation Company, Incorporated.

GENTLEMEN: I beg to hand you below statement of differences between my reports of Miller & Lux irrigation dated October 9th and October 30th, 1908.

The difference arose from picking out the riparian land from the list of irrigated land. On the report of October 9th the total amount of riparian land irrigated by Miller & Lux was 12,058.8 acres in Fresno County, or 42.2% of the whole, and 12,232.5 in Merced County, or 60.1% of the whole. On the report of October 30th 11,855.8 acres of riparian land were shown to be irrigated in Fresno County, or 41.4% of the whole, and 12,622.5 acres in Merced County, or 62.2% of the whole. This caused a slight reduction of the total acres irrigated in Fresno County and a slightly greater increase in the acres irrigated in Merced County as follows:

42.2% of 16,575.69 equals 6,994.94;

41.4% of same equals 6,862.34, a decrease of 132.60.

60.1% of 11,635.69 equals 6,993.04;

62.2% of same equals 7,237.39, an increase of 244.35.

Total increase 111.75.

1702

The S. J. & K. R. C. & I. Co.

Page 2.

Nov. 2/08.

The results are as follows:

	Acres.		Charge.	
	Report of Oct. 9.	Report of Oct. 30.	Report of Oct. 9.	Report of Oct. 30.
Fresno Co.	24,534.95	24,402.35	\$20,854.71	\$20,742.16
Merced Co.:				
1 crop	10,165.96	10,272.46	12,707.45	12,840.57
2 crops	9,988.59	10,126.44	16,481.17	16,708.62
Stanislaus Co. . .	20.00	20.00	30.00	25.00
	44,709.50	44,821.25	\$50,073.23	\$50,316.36

This makes a total increase of acreage between the two reports of 111.75 acres, and of money \$243.03.

As for the difference in carriage charge, it was assumed in the first report that all of the excess water used on non-riparian lands could be delivered to those lands through the Poso Canal. On tracing it out however to the different parcels of land where said water was used it was discovered that considerable quantity of this water had to be delivered through the Main Canal, so a corresponding carriage charge was made which increased the total bill for carriage of water from \$289.52 to \$825.17.

Yours truly,

W. C. H./W.

W. C. HAMMATT.

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Compl't's Exhibit No. 27. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

Statement of Number of Acres Irrigated from Canals of S. J. & K. R. C. & I. Co. from 1897 to 1908, Inclusive.

THE COUNTY OF STANISLAUS, ETC., ET AL.

1199

Year.	Main canal, Fresno.	Main canal, Merced.	Main canal, Stanislaus.	Dos Palos canal, Fresno.	Dos Palos canal, Merced.	Outside canal, Fresno.	Outside canal, Merced.	Total.
1897	9,250	15,003	6,401	3,255	3,241	3,122	.....	40,272
1898	5,694	23,557	10,034	4,440	3,151	2,250	11,285	60,111
1899	10,855	21,528	11,007	4,662	5,463	3,007	8,662	65,184
1900	11,215	20,129	9,750	4,052	4,060	3,132	8,145	60,483
1901	10,033	17,125	7,948	3,473	3,062	5,067	3,583	50,291
1902	10,443	17,502	9,772	3,922	4,939	4,292	4,096	54,966
1903	13,282	20,490	7,051	4,276	4,884	4,742	5,483	60,908
1904	24,361	26,944	11,284	5,431	5,002	8,104	11,723	92,849
1905	26,392	33,662	11,672	5,279	5,838	8,257	12,879	103,980
1906	20,147	32,311	11,858	5,250	6,168	8,305	10,410	94,449
1907	11,453	22,324	11,729	5,598	9,813	3,792	9,933	74,642
1908	16,915	22,472	11,637	3,775	7,650	5,544	12,628	80,621
	<u>170,040</u>	<u>273,047</u>	<u>120,144</u>	<u>53,413</u>	<u>63,271</u>	<u>59,614</u>	<u>98,827</u>	<u>838,356</u>
Average per year..	14,170	22,754	10,012	4,451	5,273	4,968	8,984	70,612

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl't's Exhibit No. 28. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1704

COMPLAINANT'S EXHIBIT No. 31.

Comparative Table of Earthwork Calculations. The S. J. & K. R. C. & I. Co., Inc.

Main Canal, Fresno Co.

Station.	From cross-sections of canal and banks, Exhibit 29-C.		From report of H. H. Henderson, Exhibit R.	From report of R. H. Goodwin, Exhibit I.	Remarks.
	Cut.	Banks + 10%			
0-0 to 45-00	88,760	67,900	8,869		
45-00 to 188-40	87,950*	87,950*	87,695		
188-40 to 275-39	149,630	54,310	54,820		
275-39 to 287-57	20,860	9,390	9,501		
287-57 to 310-00	34,040	21,310	21,886		
310-00 to 329-19	30,000	25,630	26,298		
329-19 to 352-00	32,110	21,860	14,526		
352-00 to 410-00	65,180	23,270	21,982		
410-00 to 451-63	41,390	17,180	18,884		
451-63 to 501-05	31,520	25,140	27,126		
501-05 to 529-71	15,360	17,610	17,882		
529-71 to 578-48	36,870	26,490	29,730		
578-48 to 610-00	35,530	24,440	23,463		
610-00 to 630-00	21,190	18,610	16,901		
630-00 to 659-71	32,600	24,530	20,192		
659-71 to 700-00	43,470	24,460	27,535		
700-00 to 730-00	19,610	17,520	11,097		
730-00 to 751-82	15,840	16,130	14,592		
751-82 to 810-00	50,850	41,200	10,831		
810-00 to 889-95	76,270	51,950	19,308		

*Banks without 10%

889-95 to 960-05	58,470	59,130	54,478	
960-05 to 1047-27	64,520	61,580	54,006	
1047-27 to 1119-47	51,530	49,350	45,332	
1119-47 to 1126-00	5,080	3,560	4,097	
Total (Main & Parallel Canal)	1,108,630	792,570	701,031	1,079,940
0-0 to 78-000 .....	.....	China Slough		
		85,140*	8,268	17,000
0-0 to 43-81	15,270	Spillway No. 1.		
		12,870	15,333	18,835
0-0 to 58-65	No cross-section shown	Spillway No. 2.		
			18,890	18,900

*Banks without 10%

1705

Spillway No. 3.

Station.	From cross-sections of canal and banks, Exhibit 29-C.	Cut.	Banks — 10%	From report of H. H. Hen- derson, Exhibit —.	From report of R. H. Good- win, Exhibit 1.	Remarks.
0- 0 to 57-32	18,080		8,870	18,056	24,724	
Outside Canal, Fresno County.						
0- 0 to 160-00	129,170		59,150	116,090		
160- 0 to 340-00	116,000		82,150	118,674		
340- 0 to 460-00	71,550		69,550	74,520		
460- 0 to 700-00	143,300		161,650	152,088		
700- 0 to 853-18	87,300		64,956	97,300		
853-18 to 1002-00	67,900		63,930	69,261		
	614,820		500,780	627,925	532,400	
Side Ditch, Outside Canal, Fresno Co.						
0- 0 to 160- 0	14,157		10,942	12,246		
160- 0 to 340- 0	9,245		8,540	8,000		
340- 0 to 460- 0	10,180		10,165	11,555		
460- 0 to 700- 0	19,130		16,390	22,360		
700- 0 to 853-18	9,340		8,700	10,022		
853-18 to 1002- 0	7,018		14,372	9,287		
	69,070		69,111	73,470	80,000	

Dos Palos Canal, Fresno Co.

0-0 to	102-50	.....	31,500	40,900	37,207
102-50 to	257-00	.....	45,180	63,780	54,832
257-00 to	469-50	.....	43,200	101,000	88,804
			119,880	205,680	180,843
					109,617

Branch No. 1, Dos Palos Canal, Fresno Co.

No cross-sections 38,787

Branch No. 2, Dos Palos Canal, Fresno Co.

No cross-sections 14,124

Side Ditch, Dos Palos Canal, Fresno Co.

19,400 11,700 8,450

Main Canal, Merced Co.

Station.	From cross-sections of canal and banks, Exhibit 29-C.		From report of H. H. Hen- derson, Exhibit —.	From report of R. H. Good- win, Exhibit 1.
	Cut.	Banks—10%		
1126-00 to 1343-00	180,800	153,300	145,288	
1343-00 to 1460-00	85,200	76,600	70,082	
1460-00 to 1550-00	52,550	72,650	65,054	
1550-00 to 1660-00	63,100	82,900	70,206	
1660-00 to 1759-35	55,850	80,100	76,411	
1759-35 to 1890-51	94,700	91,900	84,088	
1890-51 to 1986-58	72,570	91,030	77,871	
1986-58 to 1995-29	6,840	8,730	7,934	
Los Banos Creek, . . .	611,610	657,210	596,944	864,006
2007-51 to 2090-00	71,050	61,710	68,588	
2090-00 to 2260-00	116,500	116,100	121,412	
2260-00 to 2400-00	80,000	107,900	70,604	
2400-00 to 2590-00	173,000	172,600	172,639	
2590-00 to 2768-82	115,500	111,500	111,265	
2768-82 to 3009-12	139,300	124,400	140,524	
3009-12 to 3225-00	102,950	96,300	94,348	
798,300	790,610	779,380	840,694	

Drain Ditch.

1460-00 to 1550-00	9,540	3,660	12,890
1550-00 to 1660-00	12,230	5,469	12,222
1660-00 to 1759-35	12,290	5,710	11,896
1759-35 to 1890-51	15,530	12,740	21,655
1890-51 to 1995-29	5,310	7,010	6,910
	54,900	34,280	65,573
			46,320

Outside Canal.

1002-00 to 1140-00	63,970	73,150	59,037
1140-00 to 1349-70	108,300	112,500	102,753
1349-70 to 1518-92	87,800	93,000	93,159
1518-92 to 1760-00	129,000	152,360	111,451
	389,070	431,010	366,400
			445,225

Los Banos Creek....

1760-00 to 1900-00	115,000	141,900	123,060
1900-00 to 2020-00	74,160	70,300	79,332
2020-00 to 2140-00	53,200	73,570	52,812
2140-00 to 2230-00	35,000	50,000	35,875
2230-00 to 2290-00	25,850	28,850	26,568
2290-00 to 2370-00	21,650	34,770	30,768
2370-00 to 2567-95	80,650	100,450	80,584
	405,510	500,440	428,999
			456,655

Side Ditch.

Station.	From cross-sections of canal and banks, Exhibit 29-C.		From report of H. H. Hen- derson Exhibit —.	From report of R. H. Good- win Exhibit 1.
	Cut.	Banks—10%		
1002-00 to 1140-00	6,310	12,760	7,240	
1140-00 to 1349-70	11,030	22,470	9,837	
1349-70 to 1518-92	12,060	15,780	12,126	
1518-92 to 1579-90	3,720	6,330	3,726	
1579-90 to 1759-33	9,950	19,000	10,977	
	43,070	76,340	43,906	62,800

Spillway No. 4.

0 to 17-79	5,930	4,060	5,924	6,118
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Spillway No. 5.

0 to 67-15	15,420	17,500	15,447	23,200
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Dos Palos Canal.

469-50 to 757-00	93,700	113,500	119,772	95,020
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Dos Palos Branch No. 1.

No cross-sections				61,525
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Dos Palos Branch No. 2.

No cross-sections				63,655
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Dos Palos Branch No. 3.

No cross-sections				58,571
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Dos Palos Branch No. 4.

No cross-sections				19,344
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*Stanislans Co.**Main Canal.*

3225-00 to 3468-00	91,180	99,980	91,151	
3468-00 to 3530-00				
3530-00 to 3535-00	120,780	139,010	102,369	
3535-00 to 3547-00				
3547-00 to 3746-31				
	211,960	238,990	193,520	370,858

Orestimba Branch.

No cross-sections				11,000
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Fresno County.

THE COUNTY OF STANISLAUS, ETC., ET AL.					1207
Name of canal.	Part.	From cross-sections of canal and banks, Exhibit 29-C.	From report of H. H. Hen- derson Exhibit R.	From report of R. H. Good- win Exhibit 1.	
China Slough		Cut.			
Main					
Outside					
</					

THE COUNTY OF STANISLAUS, ETC., ET AL.

1207

Name of canal.	Part.	From cross-sections of canal and banks, Exhibit 29-C.	From report of H. H. Hen- derson, Exhibit R.	From report of R. H. Good- win, Exhibit I.
Dos Palos Canal	Branch No. 1	Cut. 93,700	119,772	95,020
	2	.....	.....	61,525
	3	.....	.....	63,655
	4	.....	.....	58,571
		.....	.....	19,344
Stanislaus County.				
Main Canal		211,960	193,520	370,858
Orestimba Branch		.....	.....	11,000
Total		<u>4,679,760</u>	<u>4,259,681</u>	<u>5,367,768</u>

Endorsed: No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl'ts' Exhibit No. 31. E. H. H. Filed, May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1709 Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Compl'ts' Exhibit No. 32. E. H. H. Master.

Branch No. 5, Colony Canal.

12900 ft. long.

30 to 50' width at top of levee.

4 to 5 ft. deep.

Average cross-section excavation 40.7 sq. ft.

Total excavation 19461 cu. yds.

Cost per Cu. Yd.

Excavator work:—

Labor .....	.0054
Board .....	.0022
Horse hire .....	.0270
" feed .....	.0006
Rent of excavator .....	.0115
Repairs of " .....	.0009

.0476

Scraper work:—

Labor .....	.01680
Board .....	.00783
Horse hire .....	.03743
" feed .....	.00194
" shoeing .....	.00009
Scraper rent .....	.00139
Plow " .....	.00028
Wagon " .....	.00013
Scraper repairs .....	.00010

.06599

Total1136

Total cost Excavator work.....	\$925.30
Scraper work.....	1284.17

\$2209.47

Built in January and February, 1908.

Endorsed: Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1711 DEF'TS' EXHIBIT A.

STATE OF CALIFORNIA,
County of Stanislaus, ss:

J. H. Maddrill of said County of Stanislaus, being duly sworn, says: That he is a citizen of the United States, of the age of eighteen years and upwards, not interested in the matter of the notice and petition, and is competent to testify in the matter of said notice and petition. That he is principal clerk of the printers and publishers, and was such at the times herein stated, of the Daily Evening News, a newspaper printed and published in said county of Stanislaus, and as such, has charge of all advertisements in said newspaper. That the notice and petition of which the annexed is a printed copy, was published in said newspaper at least 36 days, and as often during the period of said 36 days as said paper was regularly issued, to wit: Daily, Sundays excepted, from the 10th day of March, 1896, to and until the 14th day of April, 1896, both inclusive.

J. H. MADDRILL.

Subscribed and sworn to before me this 15th day of April, 1896.

[SEAL.]

J. E. WARD,

Notary Public, Stanislaus Co., Calif.

Petition.

To the Board of Supervisors of the county of Stanislaus, state of California:

We, the undersigned, inhabitants and tax payers of the county of Stanislaus, State of California, do hereby petition your honorable Board to regulate and control the rates and compensation to be collected by the San Joaquin and Kings River Canal and Irrigation Company for the sale, rental or distribution of the appropriated waters of said company to the inhabitants of said county of Stanislaus.

1712 C. C. Eastin.
 G. H. Crow.
 A. J. Trefts.
 H. V. Armstead.
 E. H. Robison.
 A. G. Stonesifer.
 C. R. Starrett.
 W. E. Isom.
 T. A. Crow.
 J. T. Crow.
 Frank Winter.
 B. Moran.
 G. A. Fink.
 W. F. Fink.
 M. L. Morris.

E. W. Crow.
 W. T. Morehead.
 C. E. Trefts.
 Jacob Trefts.
 Simon Newman.
 A. Cahen.
 E. S. Wangenheim.
 B. H. Crow.
 B. F. Crow.
 A. A. Mayes.
 Ben Peterson.
 C. H. Fink.
 W. D. Bell.
 John Gum.
 C. A. Stonesifer.

Endorsed: In the Board of Supervisors of the county of Stanislaus, State of California; Petition of C. C. Eastin et al. to regulate the water rates of the San Joaquin and Kings River Canal and Irrigation Co. Filed March 10, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy Clerk.

To the San Joaquin and Kings River Canal and Irrigation Company and to all persons interested in the matters of the petition hereto attached and in this notice:

Notice is hereby given that Wednesday the 15th day of April, 1896, at the hour of 10:30 o'clock A. M. of that day, being a day of the next regular term of the session of the said Board of Supervisors of the county of Stanislaus, at the Supervisors' Room at the Courthouse in the city of Modesto, county of Stanislaus, State of California, has been fixed as the time and place for the hearing of the said petition hereto attached.

1713 Dated this 10th day of March, 1896.

[SEAL.]

A. S. DINGLEY, *Clerk*,
By L. H. HAMMETT,
Deputy Clerk.

Endorsed: Filed April 15th, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy Clerk.

To the San Joaquin and Kings River Canal and Irrigation Company and to all persons interested in the matters of the petition hereto attached and in this notice:

Notice is hereby given that Wednesday the 15th day of April, 1896, at the hour of 10:30 o'clock A. M. of that day, being a day of the next regular term of the session of the said Board of Supervisors, of the County of Stanislaus, at the Supervisors' Room, at the Court House, in the City of Modesto, County of Stanislaus, State of California, has been fixed as the time and place for the hearing of the said petition hereto attached.

Dated this 10th day of March, 1896.

[SEAL.]

A. S. DINGLEY, *Clerk*,
By L. H. HAMMETT,
Deputy Clerk.

To the Board of Supervisors of the County of Stanislaus, State of California:

We the undersigned inhabitants and tax payers of the County of Stanislaus, State of California, do hereby petition your Honorable Board to regulate and control the rates and compensation to be collected by the San Joaquin and Kings River Canal and Irrigation Company for the sale, rental, or distribution of the appropriated waters of said company to the inhabitants of said County
1714 of Stanislaus.

C. C. Eastin.	C. H. Fink.
E. W. Crow.	G. A. Fink.
G. H. Crow.	W. D. Bell.
W. T. Morehead.	W. F. Fink.
A. J. Trefts.	John Gum.
C. E. Trefts.	M. L. Morris.
H. V. Armstead.	C. A. Stonesifer.
Jacob Trefts.	A. G. Stonesifer.
E. H. Robison.	A. Cahen.
Simon Newman.	C. R. Starrett.
J. T. Crow.	E. S. Wagenheim.
A. A. Mayes.	W. H. Isom.
Frank Winter.	B. H. Crow.
Ben Peterson.	T. A. Crow.
B. Moran.	B. F. Crow.

Endorsed: In the Board of Supervisors of the County of Stanislaus, State of California. Petition of C. C. Eastin et als, to regulate the water rates of The San Joaquin & Kings River Canal and Irrigation Co. Filed March 10, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy Clerk.

1715 *Petition.*

To the Board of Supervisors of the County of Stanislaus, State of California:

We, the undersigned, inhabitants and taxpayers of the County of Stanislaus, State of California, do hereby petition your honorable Board to regulate and control the rates and compensation to be collected by the San Joaquin and Kings River Canal and Irrigation Company for the sale, rental or distribution of the appropriated waters of said company to the inhabitants of said county of Stanislaus.

C. C. Eastin.	C. A. Stonesifer.
A. J. Trefts.	G. H. Crow.
E. H. Robinson.	H. V. Armstead.
C. R. Starrett.	A. G. Stonesifer.
T. A. Crow.	W. H. Isom.
Frank Winter.	J. T. Crow.
G. A. Fink.	B. Moran.
M. L. Morris.	W. F. Fink.
E. W. Crow.	W. T. Morehead.
C. E. Trefts.	Jacob Trefts.
Simon Newman.	A. Cahen.
E. S. Wagenheim.	B. H. Crow.
B. F. Crow.	A. A. Mayes.
Ben Peterson.	C. H. Fink.
W. D. Bell.	John Gum.

Endorsed: In The Board of Supervisors of the County of Stanislaus, State of California: Petition of C. C. Eastin et al. to regulate the water rates of the San Joaquin and Kings River Canal and Irrigation Co. Filed March 10, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy Clerk.

To the San Joaquin and Kings River Canal and Irrigation Company and to all persons interested in the matters of the petition hereto attached and in this notice:

Notice is hereby given that Wednesday, the 15th day of April, 1896, at the hour of 10.30 o'clock A. M. of that day, being a day of the next regular term of the session of the said Board of Supervisors of the County of Stanislaus, at the Supervisors' Room at the Courthouse in the city of Modesto, County of Stanislaus, State of California, has been fixed as the time and place for the hearing of the said petition hereto attached.

Dated this 10th day of March, 1896.

1716 [SEAL.]

A. S. DINGLEY, *Clerk*,
By L. H. HAMMETT,
Deputy Clerk.

STATE OF CALIFORNIA.

County of Stanislaus, ss:

I, A. S. Dingley, County Clerk of the County of Stanislaus, State of California, and ex-officio Clerk of the Superior Court thereof, do hereby certify that I have compared the foregoing copy of Petition, Notice and order and of the endorsements thereupon, with the original records of the same remaining in this office, and that the same are correct transcripts therefrom, and of the whole of said original records.

In witness whereof, I have hereunto set my hand and affixed the seal of said Superior Court, at my office in the County of Stanislaus, this 24th day of April, 1896.

[SEAL.]

A. S. DINGLEY, *Clerk*,
By L. H. HAMMETT,
Deputy Clerk.

OFFICE OF THE SHERIFF,
OF THE CITY AND COUNTY OF SAN FRANCISCO.

I hereby certify that I received the annexed Petition on the 6th day of May A. D. 1896 and personally served the same on the 11th day of May A. D. 1896, on San Joaquin and Kings River Canal & Irrigation Company, the therein named, by delivering to C. Z. Merritt the Secretary of the said Company, personally, in the City and County of San Francisco, State of California, a copy of said Petition.

Dated at San Francisco this 12th day of May A. D. 1896.

RICHARD I. WHELAN, *Sheriff*,
By E. C. HARRINGTON, *Deputy Sheriff*.

Endorsed: In the Board of Supervisors of the County of Stanislaus, State of California. Petition of C. C. Eastin et als. to regulate the water rates of the San Joaquin & Kings River Canal and Irrigation Co. Filed March 10th, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy Clerk.

1717 In the Board of Supervisors of the County of Stanislaus, State of California, Regular April Session, Wednesday, April 15th, 1896.

In the Matter of the Petition of C. C. EASTIN et al., for the Regulation and Control of the Water Rates and Compensation of the San Joaquin and Kings River Canal and Irrigation Company.

Whereas it has been made to appear by a petition of not less than 25 inhabitants who are tax payers of the County of Stanislaus, State of California, which petition is in writing and on file herein that said petitioners have petitioned this Board to regulate and control the rates and compensation to be collected by the San Joaquin and Kings River Canal and Irrigation Company, a corporation for the sale, rental and distribution of water, appropriated by said corporation to a part of the inhabitants of said County of Stanislaus, and it appearing to the Board that said petition and the notice of the hearing thereof has been duly given and published in the manner required by law, and said petitioners appearing, and the said San Joaquin and Kings River Canal and Irrigation Company not appearing.

It is therefore ordered that the further hearing of said petition be continued to and until the 13th day of May 1896, at 10:30 o'clock A. M. of that day. It is further ordered that Supervisor J. P. Barnes be and he is hereby empowered to employ such experts as he may see fit to estimate the value of the Canal and works and property of said company actually used and useful to the appropriation and furnishing of such water to such inhabitants. It is further ordered that the Clerk of this Board cause a copy of said petition and notice together with a copy of this order to be served personally on the President or Secretary of said company, prior to said 13th day of May, 1896. Carried by the following votes: Ayes, Supervisors Davis, Carmichael, Barnes and Toombs. Supervisor Osler voting no on the grounds that it would be too expensive.

1718 Endorsed: In the Board of Supervisors County of Stanislaus. In the Matter of the Petition of E. C. Easton et al. to regulate the water rates, etc. Certified Copy Petition, Notice and Order. Received, May 8, 1896, 3:47 P. M. San Joaquin and Kings River Canal Comp. O. K. R. A. D. 508 Cal. R. 76. Served Secretary Merritt. Filed on Return May 16, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy.

1719

SHERIFF'S OFFICE,
CITY AND COUNTY OF SAN FRANCISCO, CAL.,
May 14, 1896.

A. S. Dingley, Esq.

DEAR SIR: Enclosed please find summons in Re matter of C. E. Easton, service having been made.

Respectfully,

RICHARD I. WHELAN, Sheriff,
By JNO. G. FITZGERALD, Bt.

1720 To the Honorable the Board of Supervisors of the County of Stanislaus, State of California.

GENTLEMEN: As per request of Supervisor Mr. J. P. Barnes, we have made a survey of the canal belonging to the "San Joaquin and Kings River Canal and Irrigation Company" and herewith submit the following report and estimated cost of the canals, ditches, water-chutes and all other property actually used and useful to the appropriation and furnishing of water from such canal.

The canal is located on the west side of the San Joaquin Valley, being lying and situate in the counties of Fresno, Merced and Stanislaus, State of California.

The length of the main canal is 71.17 miles, 26.77 miles of which being double, making a total distance of 97.94 miles of constructed canal.

The width of the canal varies from 25 feet to 40 feet, but the majority is of 30 feet base.

37.97 miles of the canal *was* constructed in the year 1872, 28.87 miles in 1878, and 4.10 miles in 1884.

The banks of the canal are in very fair order, but the bed is badly silted in many places.

The upper 30 miles of the canal passes through a thinly settled and unimproved country, the balance of 41.17 miles through a productive and fast growing district.

The following is an estimated cost of construction of the above mentioned canal, taking in consideration the different widths, cross sections, grades, materials and appurtenances based upon the prices of materials, supplies and labor of the present date.

1721 Earth excavation 2,966,125 yards @ 64¢.....	\$192,798.10
Lumber in Head, Regulating, Distributing waste and Inlet gates, boxes, bridges, etc.:	
1,689,410 feet B. M. in place.....	55,536.50
Six station buildings	4,000.00
Telephone line 70 miles	4,900.00
Engineering, superintendence, officers of company, stationery and printing, law expenses and other incidentals	25,723.40
Right of way, first 30 miles 900 acres @ \$3.....	2,700.00
" " " Balance distance 1068 " " 25.....	26,700.00
Total Cost	\$312,358.00

Cash Value.

We place the present cash value of the above mentioned canal and works at \$251,000.00

We give the following very liberal items of annual expenses for maintenance of the above mentioned canal:

Salary, secretary	1,800.00
" Superintendent	1,800.00
" 6 section men @ \$45.....	3,240.00

Office Rent	300.00
Stationary & Printing	150.00
Rent of 7 telephone boxes	140.00
Batteries	25.00
Feeding 10 horses	1,080.00
Annual pro rata on cost of 10 horses	65.00
" " " " " " " " buggy & carts	80.00
" cleaning canal of silt & weeds	1,500.00
" Repairs on Bridges and Gates	320.00
1722	
Annual Repairs on Brush dam	500.00
" Taxes approx.	2,100.00
" Travelling & incidental expenses	150.00
Total expense	13,250.00

Modesto, Cal., June 9th, 1896.
Respectfully submitted,

R. H. GOODWIN,
Consulting Engineer.

E. D. GROIR,
D'y Co. Surveyor.

Endorsed: Report of Engineers as to value of San J. and K. R. Canal, etc. Filed June 10th, 1896. A. S. Dingley, Clerk, by L. H. Hammett, Deputy. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1723 DEF'T'S EXHIBIT "B."

"Lumber Estimate" in the Head, Regulating, Distributing Waste, and Inlet Gates, Boxes, and Bridges on the San Joaquin and Kings River and Irrigation Camp's Canal, 1896.

1724 Prices of Lumber.

Redwood planking per M. ft.	\$13.
do. timber " " "	14.
Pine " " "	11.
Piles per running ft.	13¢
Carpenter Work on—	
Bridges per M. ft.	\$5.
Small Gates " "	5.
Regulating Gate " "	7.

Freight and hauling.	Lumber per M feet.	Iron per 100 lbs.
To Dam and Headgates, Mendota Station:		
Freight	7.30	0.44
Hauling .....	.70	.02
Total	8.00	0.46
To 378-63, Firebaugh Sta.:		
Freight	7.15	0.42
Hauling .....	.70	.02
Total	7.85	0.44
To 811-60, Firebaugh Station:		
Freight	7.15	0.42
Hauling	1.75	.06
Total	\$8.90	0.48
To 111-80, Dos Palos Station:		
Freight	6.85	0.38
Hauling	1.75	.06
Total	\$8.60	0.44
To 1427-60, Dos Palos Station:		
Freight	6.85	0.38
Hauling	1.75	.06
Total	8.60	0.44
To 1895, Los Banos Station:		
Freight	6.50	0.33
Hauling	1.75	.06
Total	8.25	0.39
Over.		
1725		
To 2211-80, Los Banos Station:		
Freight	6.50	0.33
Hauling	1.15	.04
Total	\$7.65	0.37
To 2377-70, Volta Station:		
Freight	6.35	0.32
Hauling	1.15	.04
Total	\$7.50	0.36

Freight and hauling.	Lumber per M feet.	Iron per 100 lbs.
To 2456-90, Volta Station:		
Freight	6.35	0.32
Hauling .....	.85	.03
Total	<u>\$7.20</u>	<u>0.35</u>
To 2626-35, Ingomar Station:		
Freight	6.05	0.30
Hauling .....	.85	.03
Total	<u>\$6.90</u>	<u>0.33</u>
To 2943-15, Ingomar Station:		
Freight	6.05	0.30
Hauling .....	.85	.04
Total	<u>\$6.90</u>	<u>0.34</u>
To 3293-10, Newman Sta.:		
Freight	5.45	0.25
Hauling	1.15	.04
Total	<u>\$6.60</u>	<u>0.29</u>
To 3425-10, Newman Station:		
Freight	5.45	0.25
Hauling .....	.85	.04
Total	<u>\$6.30</u>	<u>0.29</u>
To 3637-15, Crows Landing:		
Freight	5.15	0.22
Hauling .....	.85	.03
Total	<u>\$6.00</u>	<u>0.25</u>
To 3755-45, Crows Landing:		
Freight	5.15	0.22
Hauling .....	.85	.03
Total	<u>\$6.00</u>	<u>0.25</u>

1220

THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1726

Lumber in Gates & Bridges.

Dam:

	Iron.	Lumber M ft.	
Brush 12,500 yds. @ 50¢....	6250.00
Piles 3600 feet @ 13¢.....	24.00	468.00
Driving piles 2400 @ 10¢....	240.00
Freight & Hauling @ \$8.	192.00
Earth levee 200 yds. 8¢.....	16.00
" " 5000 " 8.....	400.00
" Dam 3000 " 8.....	240.00

\$7806.00

Headgates:

Redwood planking \$13.....	.....	36.52	474.75
" timber 14.....	.....	7.14	100.00
Pine 11.....	.....	16.44	180.85
Carpenter Work per M \$7½.	.....	60.10	450.75
Piles 2370 ft. 13¢.....	.....	15.80	318.10
Driving piles 1620 10¢.....	.....	.....	162.00
Freight & Hauling \$8.....	.....	75.90	607.20
Iron @ 3¢.....	1040	.....	31.20
Blocks & Rope.....	64	.....	7.50
Freight & Hauling 42¢.....	1104	.....	5.00

\$2337.35

(692.)

(Add Driving 6920 sheet piling)

(3029.35)

Falling dam:

Redwood planking \$13.....	.....	53.14	690.80
Do. timber 14.....	.....	3.29	46.05
Pine 11.....	.....	8.52	93.70
Carpenter Work 7½.....	.....	64.95	487.10
Piles 3450 ft. 13¢.....	.....	23.00	448.50
Freight & Hauling \$8.....	.....	87.95	703.60
Driving piles 2640 @ 10¢....	.....	.....	264.00
Iron 3¢.....	1840	.....	55.20
Freight & Hauling 46¢.....	.....	.....	8.45
Earthwork 500 yds. 8¢.....	.....	.....	40.00

\$2837.40

(1124.00)

(Add 11240 ft. sht. pil. @ --)

(3961.40)

259-90. Inlet gate, double:

Redwood plank \$13.....	.....	4.24	55.10
Do. timber 14.....	.....	1.73	24.20
Freight & Hauling 7.85.....	.....	5.97	46.85
Carpenter Work 5.....	.....	.....	29.85

Carried forward..... 2880 193.82 \$156.00 12980.75

THE COUNTY OF STANISLAUS, ETC., ET AL.

1221

1727 Bro't for'd..... 5.97 156.00 12980.75

	Iron.	M ft.	
Carpenter work \$5.....			29.85
Iron 3¢.....	76		2.25
Freight & Hauling 44¢.....			.35
Earthwork 90 yds. 12¢.....			10.80

303-40. Inlet gate, single: 169.40

Redwood planking \$13.....	2.76	35.90
Do. timber 14.....	1.30	18.20
Freight & hauling 7.85.....	4.06	31.85
Carpenter Work 5.....		20.30
Iron 3¢.....	50	1.50
Freight & Hauling 44¢.....		.25
Earthwork 50 12¢.....		6.00

308-76. Bridge, 16' x 54': 114.00

Redwood timber \$14.....	2.02	28.25
Pine 11.....	4.54	49.95
Freight & Hauling 7.85.....	6.56	51.59
Carpenter Work 5.....		32.80
Iron 3¢.....	108	3.25
Freight & Hauling 44¢.....		.45
Earthwork 80 yds. 8¢.....		6.40

332-94. Distributing gate, 12' x 48': 172.60

Redwood planking \$13.....	6.24	81.10
Do. timber 14.....	5.55	77.70
Pine 11.....	6.12	67.30
Freight & Hauling 7.85.....	17.91	140.60
Carpenter Work 7.....		125.40
Iron 3¢.....	344	10.30
Blocks & Rope.....	36	4.10
Freight & Hauling 44.....	380	1.65
Earthwork 80 yds. 12¢.....		9.60

Forward 578 34.50 517.75

1728 Bro't for'd..... \$13954.50

3374-14. Distributing gate, 10' x 20':

Redwood planking \$13.....	3.22	41.85
Do. timber 14.....	3.39	47.45
Pine 11.....	1.87	20.60
Freight & Hauling 7.85.....	8.48	66.55
Carpenter Work 7.....		59.35
Iron 3¢.....	138	4.15
Blocks & Rope.....	36	4.10
Freight & Hauling 44¢.....	174	.75
Earthwork 100 yds. 12¢.....		12.00

256.80

1222 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

338-47. Regulating gate, 10' x 50':

Redwood plank \$13.....	5.09	66.15
“ timber 14.....	3.83	53.60
Pine 11.....	5.21	57.30
Freight & Hauling 7.85.....	14.13	110.90
Carpenter Work 7.....		98.90
Iron 3¢.....	290	8.70
Blocks & Rope.....	36	4.10
Freight & Hauling 44.....	326	1.40
Earthwork 90 yds. 12.....		10.80

411.85

378-63. Bridge, 16' x 60':

Redwood timber \$14.....	1.58	22.10
Pine 11.....	5.37	59.10
Freight & Hauling 7.85.....	6.95	54.55
Carpenter Work 5.....		34.75
Iron 3¢.....	68	2.05
Freight & Hauling 44.....		.30
Earthwork 80 yds. 8¢.....		6.40

179.25

389-25. Distributing gate, double:

Redwood plank \$13.....	3.87	50.30
do. timber 14.....	1.27	17.75
Freight & hauling 8.90.....	5.14	45.75
Carpenter Work 5.....		25.70

Forward 486 34.70 \$139.50 14802.40

1729 Bro't for'd..... 139.50 14802.40

Iron 3¢.....	90	2.70
Freight & Hauling 48¢.....		.45
Earth 90 yds. 12¢.....		10.80

153.45

424-36. Distributing gate, double:

Same as above..... 90 5.14 153.45

495-65. Waste gate, 30 x 48:

Redwood planking \$13.....	15.97	207.60
do. timber 14.....	3.91	54.75
Pine 11.....	10.86	119.45
Freight & Hauling 8.90.....	30.74	273.60
Carpenter Work 7.....		215.20
Iron 3¢.....	462	13.85
Blocks & Rope.....	36	4.10
Freight & Hauling 48¢.....	498	2.40
Earthwork 50 @ 12.....		6.00

896.95

495-65. Regulating gate, 12' x 48':

Redwood plank	13....	3.44	44.70
do. timber	14....	4.31	60.35
Pine 11.....		5.83	64.15
Freight & Haul, 8.90.....		13.58	120.85
Carpenter Work 7.....			95.05
Iron 3¢.....	230		6.90
Blocks & Rope.....	36		4.10
Freight & Haul, 48¢.....	266		1.25
Earth 80 yds. 12¢.....			9.60

406.95

541-80. Inlet gate, double:

Redwood plk.	13....	4.24	55.10
do. timber	14....	1.73	24.20
Freight & Hauling 8.90.....		5.97	53.15
Carpenter Work 5.....			29.85
Iron 3¢.....	76		2.30
Freight & Haul, 48¢.....			.35
Earth 90 yds. 12¢.....			10.80

175.75

Forward 448 50.29 \$16588.95

1730 Bro't for'd \$16588.95

578-64. Bridge, 16 x 62:

Redwood planking \$13....	0.58	7.55
do. timber 14....	2.24	31.35
Pine 11.....	6.61	72.70
Freight & hauling 8.90.....	9.43	83.90
Carpenter Work 5.....		47.15
Iron 3¢.....	240	7.20
Freight & hauling 48¢.....		1.15
Earth 80 8¢.....		6.40

257.40

586. Regulating gate, 7' x 40', W. C.:

Redwood plank \$13....	5.56	72.30
Do. timber 14....	4.81	67.35
Pine 11.....	4.02	44.20
Freight & Haul, 8.90.....	14.39	128.05
Carpenter Work \$7.....		100.75
Iron 3¢.....	273	8.20
Blocks & Rope.....	36	4.10
Freight & Haul, 48¢.....	309	1.50
Earth 120 yds. 12¢.....		14.40

440.85

586. Regulating gate, 7 x 50, E. C.:

Redwood plank	13....	4.72	61.35
" timber	14....	4.78	66.90
Pine 11		5.96	65.55
Freight & Haul. 8.90.....		15.46	137.60
Carpenter Work 7.....			108.20
Iron 3¢	325		9.75
Blocks & Rope.....	36		4.10
Freight & Haul.....	361		1.75
Earth 150 yds. 12.....			18.00

473.20

599-40. Distributing gate, single:

Redwood plank	13....	1.87	24.30
do. timber	14....	1.04	14.55

Freight & Haul. \$8.90.....	2.91	25.90
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838 42.19 64.75 \$17760.40

1731 Bro't For'd	64.75	17760.40
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Carpenter Work 7.....		20.35
Iron 3¢	60	1.80
Freight & Haul. 48.....		.30
Earth 50 yds. 12.....		6.00

93.20

599-80. Distributing gate, single:

Same as above.....	60 2.91	93.20
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643. Distributing gate, single:

Same as above.....	60 2.91	93.20
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643-40. Distributing gate, double:

Redwood plank	13....	3.02	39.25
" timber	14....	1.43	20.00
Freight & Hauling 8.90.....		4.45	39.60
Carpenter Work 5.....			22.25
Iron 3	90		2.70
Freight & Hauling 48.....			.45
Earth 80 yds. 12¢.....			10.80

135.05

672-25 Distributing gate, single:

Same as 599-80.....	60 2.91	93.20
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685-70. Bridge, 14 x 30:

Redwood plank	13....	0.84	10.90
" timber	14....	2.30	32.20
Pine 11	1.98	21.80
Freight & Hauling 8.90	.....	5.12	45.55
Carpenter Work 5	.....		25.60
Iron 3¢	65		1.95
Freight & Hauling 48	.....		.30
Earthwork 80 yds. 8¢	.....		6.40

144.70

686-60. Distributing gates, 20 x 30:

Redwood plank	13....	4.14	53.80
" timber	14....	3.78	52.90
Freight & Haul. 8.90	7.92	70.50
Carpenter Work 7		55.45

395	26.22	\$232.65	\$18412.95
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1732 Bro't for'd		\$232.65	18412.95
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Iron 3¢	145	4.35
Blocks & Rope	36	4.10
Freight & Haul. 48¢	181	.85
Earth 150 12¢		18.00

259.95

699-95. Distributing gate, single:

Same as 599-40	60	2.91	93.20
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699-95. Distributing gates, double:

Same as 643-40	90	4.45	135.05
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727-80. Distributing gate, single:

Same as 599-40	60	2.91	93.20
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740-50. Distributing gate, single:

Same as 599-40	60	2.91	93.20
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754-60. Distributing gate, single:

Same as 599-40	60	2.91	93.20
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755-30. Distributing gate, single:

Same as 599-40	60	2.91	93.20
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762-30. Bridge, 14 x 62:

Redwood plank	13....	0.24	3.10
do. timber	14....	1.80	25.20

1226 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

Pine 11	4.59	50.50
Freight & Haul. 8.90.....	6.63	59.00
Carpenter Work 5		33.15
Iron 3	82	2.45
Freight & Haul. 48.....		.40
Earth 80 8¢.....		6.40

180.20

767-40. Inlet gate, single:

Redwood plank 13.....	2.76	35.90
" timber	1.30	18.20
Freight & Hauling 8.90.....	4.06	36.15
Carpenter Work 5.....		20.30
Iron 3	50	1.50
Freight & Haul. 48.....		.25
Earthwork 50 12¢.....		6.00

118.30

667 29.69 19572.45

1733 Bro't for'd 19572.45

762-30. Regulating gate, 15 x 40:

Redwood plank 13.....	5.18	67.35
do. timber 14.....	5.14	71.95
Pine 11	5.82	64.00
Freight & Haul. 8.90.....	16.14	143.65
Carpenter Work 7.....		113.00
Iron 3¢	280	8.40
Blocks & Rope	36	4.10
Freight & Haul. 48.....	316	1.50
Earthwork 80 yds. 12¢.....		9.60

483.55

769-70. Distributing gate, single:

Same as 599-40..... 60 2.91 93.20

783-50:

do. do. 60 2.91 93.20

797-10:

do. do. 60 2.91 93.20

810-20:

do. do. 60 2.91 93.20

810-20:

do. do. 60 2.91 93.20

837. Distributing gate, single:

Redwood plank	13....	1.87	24.30
do. timber	14....	1.04	14.55
Freight & Haul. 8.60.....		2.91	25.
Carpenter Work 7.....			20.35
Iron 3¢	60		1.80
Freight & Haul. 44¢.....			.25
Earth 50 yds. 12.....			6.00

92.25

848-10. Inlet gate, single:

Redwood plank	13....	2.76	35.90
do. timber	14....	1.30	18.20
Freight & Hauling 8.60.....		4.06	34.90
Carpenter Work 5.....			20.30
Iron 3¢	50		1.50
Freight & haul. 44.....			.25
Earthwork 50 12¢.....			6.00

117.05

Forward	690	37.66	20731.30
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1734 Bro't for'd	20731.30
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864-40. Distributing gate, single:

Same as # 837.....	60	2.91	92.25
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865:

do. do.	60	2.91	92.25
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878-80:

do. do.	60	2.91	92.25
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893-10:

do. do.	60	2.91	92.25
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893-60:

Distributing gates	60	2.91	92.25
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461.25

894-60. Regulating gate, 14 x 48:

Redwood plank	13....	5.43	70.60
do. timber	14....	4.03	56.40
Pine 11		10.03	110.35
Freight & Haul. 8.60.....		19.49	167.60
Carpenter work 7			136.45
Iron 3	314		9.40
Block & Rope.....	36		4.10
Freight & Haul.....	350		1.55
Earthwork 70 yds. 12.....			8.40

564.85

1227

894-60. Regulating gate, 14 x 40:

Redwood planking 13....	5.08	66.05	
do. timber 14....	5.97	83.60	
Pine 11	5.77	63.45	
Freight & Haul. 8.60.....	16.82	144.65	
Carpenter Work 7.....		117.75	
Iron 3	294	8.80	
Blocks & Rope.....	36	4.10	
Freight & Haul. 44.....	330	1.45	
Earthwork 100 12¢.....		12.00	
			501.85

919-90. Distributing gate, single:

Same as 837.....	60	2.91	92.25	
937-75:				
do. do.	60	2.91	92.25	
947-75:				
do. do.	60	2.91	92.25	
960-80:				
do. do.	60	2.91	92.25	
973-80:				
do. do.	60	2.91	92.25	
1002-20:				
do. do.	60	2.91	92.25	553.50
Forward	1268	68.32		\$22812.75

1735 Bro't for'd \$22812.75

1013-60. Inlet gate, single:

Same as 848-10.....	50	4.06	117.05	
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1030-40. Distributing gate, single:

Same as 837.....	60	2.91	92.25	
1056-40:				
do. do.	60	2.91	92.25	
1056-40:				
do. do.	60	2.91	92.25	
1083:				
do. do.	60	2.91	92.25	369.00

1110-80. Bridge, 20 x 54:

Redwood timber	13....	3.70	51.80
Pine 11	.....	5.42	59.60
Freight & haul, 8.60	.....	9.12	78.45
Carpenter Work 5	.....		45.60
Iron 3¢	100		3.00
Freight & Haul, 44	.....		.45
Earthwork 80 yds, 8	.....		6.40

245.30

1110-80. Bridge, 16 x 72:

Redwood timber	14....	2.23	31.20
Pine 11	.....	5.62	61.80
Freight & Haul, 8.60	.....	7.85	67.50
Carpenter work 5	.....		39.25
Iron 3¢	130		3.90
Freight & Haul, 44¢	.....		.55
Earthwork 80 @ 8	.....		6.40

210.60

1129-60. Inlet gate, double:

Redwood plank	13....	4.24	55.10
Do. timber	14....	1.73	24.20
Freight & haul 8.60	.....	5.97	51.35
Carpenter work 5	.....		29.85
Iron 3	76		2.30
Freight & haul, 4430
Earthwork 90-12		10.80

173.90

Forward	596	38.64		\$23928.60
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1736 Bro't ford.				\$23928.60
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1134-40. Distributing gate, double:

Redwood plank	13....	3.02	39.25
" timber	14....	1.43	20.00
Freight & Haul, 8.60	.....	4.45	38.25
Carpenter Work 5	.....		22.25
Iron 3¢	90		2.70
Freight & Haul, 44	.....		.40
Earth 80 yds, 12		10.80

133.65

1162-75. Distributing gate, single:

Same as 837	60	2.91	92.25
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1227:

do. do.	60	2.91	92.25
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184.50

1228-90. Regulating gate, 8 x 40:

Redwood plank	13....	4.56	59.30
do. timber	14....	2.32	32.50
Pine 11	.....	2.28	25.10
Freight & Haul 8.60	.....	9.16	78.75
Carpenter work 7	.....		64.10
Iron 3¢	154		4.60
Blocks & rope	36		4.10
Freight & Haul. 44	190		.85
Earth 80 yds. 12		9.60

278.90

1229-60. Inlet gate, single:

Same as 848-10, double	50	4.06	117.05
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1286-90. Inlet gate, double:

Same as 1129-60	76	5.97	173.90
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1346-30:

do. do.	76	5.97	173.90
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347.80

1347-43. Regulating gate, 12 x 48:

Redwood plank	13....	5.49	71.40
do. timber	14....	2.97	41.60
Pine 11	.....	6.59	72.50
Freight & Haul. 8.60	15.05	129.45
Carpenter Work 7		105.35

For'd	566	50.48	\$420.30	\$24990.50
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1737 Bro't for'd			\$420.30	\$24990.50
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Iron 3¢	220		6.60
Blocks & Rope	36		4.10
Freight & Haul. 44¢	256		1.10
Earth 60 yds. 12		7.20

439.30

1347-43. Regulating gate, 24 x 50:

Redwood plank	13....	8.25	107.25
do. timber	14....	7.78	108.90
Pine 11	.....	10.16	111.75
Freight & Hauling 8.60	.....	26.19	225.25
Carpenter Work 7	.....		183.35
Iron 3¢	340		10.20
Blocks & Rope	36		4.10
Freight & Haul. 44	376		1.65
Earthwork 80 yds. 12	.....		9.60

762.05

1347-43. Bridge, 16 x 72:

Redwood timber	14....	2.14	30.00
Pine 11	.....	5.96	65.55
Freight & Haul. 8.60	.....	8.10	69.65
Carpenter work 5	.....		40.50
Iron 3¢	100		3.00
Freight & Haul. 44	.....		.45
Earthwork 40 @ 8	.....		3.20

212.35

1347-43. Waste gate, 16 x 36:

Redwood plank	13....	8.35	108.55
do. timber	14....	5.79	81.05
Pine 11	.....	6.46	71.05
Freight & Haul. 8.60	.....	20.60	177.15
Carpenter work 7	.....		144.20
Iron 3¢	394		11.80
Blocks & Rope	36		4.10
Freight & Haul. 44	430		1.90
Earthwork 100 12	.....		12.00

611.80

1054 54.89 \$27016.00

1738 Bro't ford. \$27016.00

1359. Inlet gate, double:

Same as 1129-60..... 76 5.97 173.90

1375-70:

do. do. 76 5.97 173.90

1396-20:

do. do. 76 5.97 173.90

521.70

1429-70. Distributing gate, single:

Redwood plank	13....	1.87	24.30
do. timber	14....	1.04	14.55
Freight & Haul. 8.25	.....	2.91	24.00
Carpenter work 7	.....		20.35
Iron 3	60		1.80
Freight & Haul. 39¢	.....		.20
Earth 50 yds. 12¢	.....		6.00

91.20

1462-15. Inlet gate, double:

Redwood plank	13....	4.24	55.10
Do. timber	14....	1.73	24.20

Freight & haul. 8.25.....	5.97	49.25	
Carpenter work 5.....		29.85	
Iron 3¢		2.30	
Freight & Haul 39¢.....		.30	
Earthwork 90 yds. 12.....		10.80	
			171.80

1506-50. Box, 2 x 4 inlet:

Redwood 13.....	0.43	5.60	
Freight & Haul. 8.25.....		3.55	
Carpenter work 5.....		2.15	
Iron 3	7	.20	
Earth -3- 12.....		.35	
			11.85

1519-43. Bridge, 14 x 67:

Redwood timber 14.....	1.25	17.50	
Pine 11	4.02	44.20	
Freight & Haul. 8.25.....	5.27	43.45	
Carpenter work 5.....		26.35	
Iron 3		1.95	
Freight & Haul. 39.....		.25	
Earth 80 @ 8.....		6.40	
	436	32.49	\$27952.65

1739 Bro't for'd			\$27952.65
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1522-90. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1541-70. Box 2 x 4:

Same as 1506-40.....	7	0.43	11.85
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1617-55. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1637-20. Distributing gate, single:

3 x 8½ of 1429-70.....	40	1.94	45.60
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1646-10. Inlet gate, single:

Redwood plank 13.....	2.76	35.90	
do. timber 14.....	1.30	18.20	
Freight & Haul. 8.25.....	4.06	33.50	
Carpenter work 5.....		20.30	
Iron	50	1.50	
Earthwork 50-12		6.00	
Freight & Haul. 44.....		.20	
			115.60

1647-15. Bridge, 16 x 54:

Redwood timber 14.....	2.09	29.25
Pine 11.....	4.16	45.75
Freight & Haul 8.25.....	6.25	51.55
Carpenter work 5.....		31.25
Iron 3.....	100	3.00
Freight & Haul 39.....		.40
Earth 80 yds. 8.....		6.40

167.60

1647-15. Bridge, 16 x 54:

Same as above.....	100	6.25	167.60
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1651-90. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1658-15:

do. do.	60	2.91	91.20
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182.40

1659-50. Box, 2 x 2:

Same as 1506-40.....	7	0.43	11.85
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1697-45. Distributing gate:

3 x 8½, 1429-70.....	40	1.94	45.60
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584 32.94 \$28883.15

1740 Bro't for'd			\$28883.15
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1701-40. Inlet gate, double:

Same as 1462-15.....	76	5.97	171.80
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1705-70:

Do. Do.	76	5.97	171.80
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1715-90. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1715-90:

Do. Do.	60	2.91	91.20
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182.40

1716-80. Bridge, 16 x 56:

Redwood timber 14.....	1.65	23.10
Pine 11.....	4.93	54.25
Freight & Haul 8.25.....	6.58	54.30
Carpenter Work 5.....		32.90
Iron 3.....	66	2.20
Freight & Haul 39.....		.25
Earth 80 yds. 8.....		6.40

173.40

1716-80. Bridge, 16 x 66:

Redwood timber 14.....	2.51	35.15
Pine 11	4.75	52.25
Freight & Haul. 8.25.....	7.26	59.90
Carpenter Work 5.....		36.30
Iron 3	85	2.55
Freight & Haul. 39.....		.35
Earth 80 @ 8.....		6.40

192.90

1719-90. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1720:

Do. Do.	60	2.91	91.20
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1735-10:

Do. Do.	60	2.91	91.20
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273.60

1740-60. Inlet gate, double:

Same as 1462-15.....	76	5.97	171.80
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1748. Dist'g gate, single:

Same as 1429-70.....	60	2.91	91.20
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1748:

Do. Do.	60	2.91	91.20
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1778-90:

Do. Do.	60	2.91	91.20
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1780-08:

Do. Do.	60	2.91	91.20
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364.80

Forward	919	57.94	\$30585.65
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1741 Bro't for'd			\$30585.65
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1780-08. Bridge, 20 x 50:

Redwood timber 14.....	3.74	52.35
Pine 11	4.63	50.95
Freight & Haul. 8.25.....	8.37	69.05
Carpenter Work 5		41.85
Iron 3	135	4.05
Freight & Haul. 39.....		.55
Earth 80 @ 8.....		6.40

225.20

1750-08. Regulating gate, 16 x 36:

Redwood plank 13.....	5.78	75.15	
Do. timber 14.....	4.34	60.75	
Pine 11	5.78	63.60	
Freight & Haul. 8.25.....	15.90	131.15	
Carpenter work 7		111.30	
Iron 3	328	9.85	
Blocks & Rope.....	36	4.10	
Freight & Haul. 39.....	364	1.45	
Earthwork 80 yds. 12.....		9.60	
			466.95

1813. Inlet gate, single:

Same as 1646 x 10.....	50	4.06	115.60
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1815. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1816-20:

Do. Do.	60	2.91	91.20
			182.40

1829-70:

Same as 1506-40.....	7	0.43	11.85
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1830-50. Distributing gate, double:

Redwood plank 13....	3.02	39.25	
" timber 14....	1.43	20.00	
Freight & Haul. 8.25.....	4.45	36.70	
Carpenter Work 5.....		22.25	
Iron 3	90	2.70	
Freight & Haul. 39.....		.35	
Earth 80 yds. 12.....		10.80	
			132.05

Forward	730	39.03	\$31719.70
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1742. Bro't for'd			\$31719.70
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1830-50. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1835-50:

Do. Do.	60	2.91	91.20
			182.40

1837-50. Bridge, 12 x 54:

Redwood timber 14.....	2.06	28.85	
Pine 11	2.92	32.10	
Freight & Haul. 8.25.....	4.98	41.00	
Carpenter work 5		24.90	

Iron 3	92	2.75	
Freight & Haul. 39.....	35	
Earth 80 yds. 8.....		6.40	136.35
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1837-50. Bridge, 16 x 64:				
Redwood timber 14.....		2.12	29.70	
Pine 11		4.61	50.70	
Freight & Hauling 8.25.....		6.73	55.50	
Carpenter work 5	33.65	
Iron 3	2.70	
Freight & Haul 39¢.....	35	
Earth 80 @ 8.....		6.40	179.00
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1848-15. Distributing gate, single:				
Same as 1429-70.....	60	2.91	91.20	
1848-60:				
Do. Do.	60	2.91	91.20	
1859-10:				
Do. Do.	60	2.91	91.20	
1865-35:				
Do. Do.	60	2.91	91.20	
1865-90:				
Do. Do.	60	2.91	91.20	456.00
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1869-30. Inlet gate, single:				
Same as 1646-10.....	50	4.06	115.60
1871. Regulating gate, 6 x 48:				
Redwood timber 14.....		2.24	31.35	
Do. plk. 13		6.74	87.60	
Pine		3.89	42.80	
Freight & Haul. 8.25.....		12.87	106.15	
Carpenter work 7	90.10	
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Forward	652	49.01	358.06	32789.05
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1743 Bro't for'd			\$358.00	32789.05
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Iron	254	7.60	
Block & Rope.....	36	4.10	
Freight & Haul.	290	1.15	
Earthwork 70 @.....	12	8.40	379.25
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1882-25. Box, 2 x 2:

Same as 1506-40.....	70	0.43	11.85
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1887-65. Box, 3 x 3:

Redwood plk. 14.....	0.65	9.15	
Freight & Haul. 8.25.....	5.35	
Carpenter Work 5.....	3.25	
Iron 3.....	26	.....	.75	
Ft. & Haul. 39.....	.....	.....	.10	
Earthwork 30 12.....	3.60	
				22.20

1893-50. Distributing gate, single:

Same as 1429-70.....	60	2.91	91.20
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1893-84. Bridge, 14 x 56:

Redwood Timber 14.....	2.05	28.70	
Pine 11.....	3.70	40.70	
Freight & Haul. 8.25.....	5.75	47.45	
Carpenter work 5.....	.....	.....	28.75	
Iron 3.....	73	.....	2.20	
Freight & Haul. 39.....	.....	.....	.30	
Earth 80 8.....	.....	.....	6.40	
				154.50

1893-84. Regulating gate, 16 x 36:

Redwood plk. 13.....	.....	3.74	48.60	
do. timber 14.....	.....	2.02	28.30	
Pine 11.....	.....	5.24	57.65	
Freight & Haul. 8.25.....	.....	11.00	90.75	
Carpenter work 7.....	.....	.....	77.00	
Iron.....	274	.....	8.20	
Blocks & Ropes.....	36	4.10	
Freight & Haul. 39.....	310	1.25	
Earth 80 @ 12.....	9.60	
				325.45

Forward.....	694	20.74	\$33773.50
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1744 Bro't for'd.....				\$33773.50
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1894-35. Inlet gate, single:

Same as 1646-10.....	50	4.06	115.60
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1940. Distributing gate, single:

Redwood plank 13.....	1.87	24.30	
Do. timber 14.....	1.04	14.55	
Freight & Haul. 7.65.....	.....	2.91	22.25	
Carpenter work 5.....	.....	.....	14.55	
Iron 3.....	60	.....	1.80	
Freight & Haul. 37.....	.....	.....	.20	
Earth 50 yds. 12.....	.....	.....	6.00	
				83.65

1238 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1940-20. Distributing gate, single:

Same as 1940..... 60 2.91 83.65

1980-80:

Do. Do. 60 2.91 83.65

1980-80:

Do. Do. 60 2.91 83.65 250.95

2004-70. Regulating gate:

Redwood plank 13.....	6.16	80.10	
do. timber 14.....	4.46	62.45	
Pine 11.....	3.64	40.05	
Freight & Haul. 7.65.....	14.26	109.10	
Carpenter work 7.....		99.80	
Iron 3.....	354	10.60	
Blocks & Rope.....	36	4.10	
Freight & Haul. 37.....	390	1.45	
Earth 100 12.....		12.00	
			419.65

1002-20. Distributing gate, single:

Same as 837..... 60 2.91 92.25

1163-75:

Do. Do. 60 2.91 92.25 184.50

1519-43. Bridge, 16 x 72:

Redwood timber 14.....	1.64	22.95	
Pine 11.....	5.75	63.25	
Freight and Haul. 8.25.....	7.39	60.95	
Carpenter work 5.....		36.95	
Forward.....	764	43.17	184.10 34827.85

1745 Bro't for'd \$184.10 \$34827.85

Iron 3.....	113	3.40	
Freight & Haul. 39.....		.45	
Earth 80 8.....		6.40	194.35
			35022.20

Deduct error in carpenter work, on Distributing Gates,
Single 56 x \$5.80..... 324.80

To Los Banos Creek..... \$34697.40

Bro't for'd \$34697.40

2017. Waste gate:

Redwood Plank 13	5.70	74.50
Do. timber 14	5.92	82.90
Pine	12.38	136.20
Carpenter work 7	24.00	168.00
Piles 500 ft. 13¢	3.33	65.00
Driving 340 ft. 5¢ .....	.....	17.00
Freight & Haul. 7.65	27.33	209.10
Iron	640	19.20
Blocks & Rope	36	4.10
Freight & Haul	676	2.50
Earth 200 @ 12 .....	.....	24.00

802.50

2017. Regulating gate, 22 x 50:

Redwood plank 13	7.24	94.10
" timber 14	7.26	101.65
Pine 11	9.27	102.
Freight & Haul. 7.65	23.77	181.85
Carpenter work 7 .....	.....	166.40
Iron 3	464	13.90
Blocks & Rope	72	8.20
Freight & Haul. 37	536	2.00
Earthwork 50 12	6.00

676.10

2021-50. Distributing gate, single:

Same as 1940	60	2.91	83.65
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Forward 1277 54.01 \$36,259.65

1746 Bro't for'd \$36,259.65

2055-10. Box, 2 x 4:

Redwood 13	0.43	5.60
Freight 7.65 .....	.....	3.30
Carpenter work 5 .....	.....	2.15
Iron 3	7	.20
Earth 3 12 .....	.....	.35

11.60

2077. Bridge, 16 x 72:

Redwood timber 14	1.97	27.60
Pine 11	5.63	61.95
Ft. & Haul. 7.65	7.60	58.15
Carpenter work 5 .....	.....	38.00
Iron	120	3.60
Ft. & Haul. 37 .....	.....	.45
Earth 80 yds. 8 .....	.....	6.40

196.15

2977-65. Distributing gate, single:

Same as 1940.....	60	2.91	83.65	
2088-50, Box 3 x 3.....	26	0.65	22.00	
				105.65

2102-45. Distributing gate, single:

Same as 1940.....	60	2.91	83.65	
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2115-35. Bridge, 16 x 62:

Redwood timber 14.....	1.97	27.60		
Pine	4.29	47.20		
Freight & Haul. 7.65.....	6.26	47.90		
Carpenter Work 5.....		31.30		
Iron	94	2.80		
Freight & Haul. 37.....		.35		
Earth 80 @ 8.....		6.40		
				163.55

2117-20. Distributing gate, single:

Same as 1940.....	60	2.91	83.65	
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2121:

Box, 2 x 3	7	0.40	11.00	
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2127-50. Dist. gate:

Same	60	2.91	83.65	
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2137-90:

Do. Do. 1940.....	60	2.91	83.65	
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2153-05:

Do. Do.	60	2.91	83.65	345.00
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Ford.	614	32.80		37165.85
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1747 Bro't for'd				\$37,165.85
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2155-15:

Box, 2 x 3.....	7.04			11.00
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2155-25. Regulating gate, 24 x 42:

Redwood plank 13.....	6.72	87.35		
do. timber 14	4.24	59.35		
Pine	7.20	79.20		

Freight & haul. 7.65.....	18.16	138.90		
Carpenter work 7.....		127.10		

Iron 3	304	.....	9.10	
Block & Rope.....	36	.....	4.10	
Freight & Haul. 37.....	340	.....	1.25	
Earth 80 12.....		.....	9.60	
				515.95
2189-80. Box	26	0.65	.....	22.00
2193-60. Bridge, 16 x 70:				
Redwood timber 14.....		2.26	31.65	
Pine 11		5.46	60.05	
Freight & Haul. 7.65.....		7.72	59.05	
Carpenter work 5.....			38.60	
Iron	168		5.05	
Freight & Haul. 37.....			.60	
Earth 80 @8			6.40	
				201.40
2194. Box, 2 x 4....	7	0.43	.....	11.85
2205-30. Inlet gate, single:				
Redwood Plank 13.....		2.68	34.85	
" timber 14		1.32	18.50	
Freight & Haul. 7.65.....		4.00	30.60	
Carpenter work 5.....			20.00	
Iron 3	50		1.50	
Ft. & Haul. 37.....			.20	
Earthwork 60 12.....			7.20	
				112.85
2254-40. Bridge, 16 x 70:				
Redwood plk. 13		1.0	13.00	
" timber 14		3.29	46.05	
Pine		6.51	71.60	
Freight & Haul. 6.5.....		10.80	81.00	
Forward	562	42.16	211.65	38040.90
1748 Bro't for'd			\$211.65	\$38,040.90
Carpenter Work 5.....			54.00	
Iron	148		4.45	
Freight & Haul. 35 .....			.50	
Earth 80 8.....			6.40	
				277.00
2261-25:				
Inlet Gate, Single.....	50	4.0	112.25	
2276-25:				
Dist. " "	60	2.91	83.20	

2299-45:			
Box, 3 x 3.....	26	0.65	22.00
2312-65:			
" ".....	26	0.65	22.00
2325-25:			
" ".....	26	0.65	22.00
			<hr/>
2341-42. Bridge, 16 x 66:			
Redwood timber 14.....		2.21	30.95
Pine.....		4.16	45.75
Freight & Haul. 7.50.....		6.37	47.75
Carpenter Work 5.....			31.85
Iron.....	72		2.15
Freight & Haul. 35.....			.25
Earth 80 @ 8.....			6.40
			<hr/>
			165.45
2371. Distributing gate, single:			
R. W. plank 13.....		1.87	24.30
do. timber 14.....		1.04	14.55
Ft. & Haul. 7.50.....		2.91	21.80
Carpenter work 5.....			14.55
Iron.....	60		1.80
Ft. & Haul. 36.....			.20
Earth 50 yds. 12.....			6.00
			<hr/>
			83.20
2373-80:			
Dist. Gate, Single.....	60	2.91	83.20
2398-50:			
Inlet Gate, Single.....	50	4.00	111.05
2399-70:			
Dist. Gate, Double.....	90	4.45	127.40
2405-90. Bridge, 16 x 72:			
Redwood timber 14.....		1.81	25.35
Pine.....		4.74	52.15
Freight & Haul. 7.20.....		6.55	47.00
Carpenter 5.....			32.75
			<hr/>
Forward.....	668	36.05	\$157.25
			<hr/>
1749 Bro't for'd.....			\$157.25
			<hr/>
Iron @ 3.....	78		2.35
Freight & Haul. 35.....			.25
Earth 80 @ 8.....			6.40
			<hr/>
			166.25

2406-70:

Dist. Gate, Single.....	60	2.91	82.35
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2432-50:

" " " Double ..	90	4.45	127.40
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2434:

" " " Do. ..	90	4.45	127.40
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2460:

" " " Single ...	60	2.91	81.50	418.65
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2460-50. Regulating Gate, 16 x 40:

Redwood Plk. 13	7.61	98.90	
do. timber 14	2.81	39.35	
Pine 11	7.45	81.95	
Freight & Haul. 6.90.....	17.87	123.30	
Carpenter work 7.....		118.10	
Iron	400	12.00	
Blocks & Rope.....	72	8.20	
Freight & Haul. 33.....	472	1.55	
Earth 100 12.....		12.00	
			495.35

2462-05. Regulating gate, 8 x 42:

Redwood plk. 13.....	6.28	81.65	
" tim. 14.....	3.17	44.40	
Pine 11	3.86	42.45	
Ft. & Haul. 6.90.....	13.31	91.85	
Carpenter 7		93.15	
Iron 3	254	7.60	
Blocks & Rope.....	36	4.10	
Ft. & Haul. 33.....	290	.95	
Earth 70 @ 12.....		8.40	
			374.55

2485-60. Dist. gate, single.	60	2.91	81.50
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2485-70. Inlet gate, double:

Redwood plk. 13.....	3.66	47.60	
" timber 14	1.84	25.75	
Freight & Haul. 6.90.....	5.50	37.95	
Carpenter work 5.....		27.50	
	1092	54.31	138.80
			40,685.60

1750 Bro't forwdl.	\$138.80	\$40,685.60
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Iron 3	65	1.95	
Ft. & Haul. 33.....		.20	
Earth 80 12.....		10.80	
			141.75

2501-60:

Dist. Gate, Single.....	60	2.91	81.50
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2501-60:

Inlet Gate, Double.....	65	5.50	141.75
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2578-45:

Dist. Gate, Single.....	60	2.91	81.50
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2597-20:

Do. Do. Do.	60	2.91	81.50
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2609-90:

Box 3 x 3.....	26	0.65	21.35
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407.60

2610-30. Regulating gate, 16 x 42:

Redwood plk. 13.....	5.64	73.30
Do. timber 14.....	3.22	45.10
Pine 11.....	....	5.11	56.20
Freight & Haul. 6.90.....	....	13.97	96.40
Carpenter 7.....	....	....	97.80
Iron.....	294	....	8.80
Blocks & Rope.....	36	....	4.10
Freight & Haul. 33.....	330	1.00
Earth 70 @ 12.....	8.40

391.10

2626. Distrib. Gate, Single..	60	2.91	81.50
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2626-35. Bridge, 16 x 68:

Redwood timber 14.....	2.28	31.90
Pine 11.....	5.72	62.90
Freight & Haul. 6.90.....	8.00	55.20
Carpenter 5.....	....	....	40.
Iron 3.....	90	2.70
Freight & Haul. 33.....30
Earth 80 @ 8.....	6.40

199.40

2669-50:

Box 3 x 3.....	26	0.65	22.00
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2684-70:

" ".....	26	0.65	22.00
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2687-20:

Dist. Gate, Single.....	60	2.91	82.35
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2689-75:

Box 3 x 3.....	26	0.65	22.00
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2702-90:

"	"	26	0.65	22.00
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2705-20:

Dist. Gate, Single	60	2.91	82.35
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252.70

1004	48.18	842.159.65
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1751 Bro't ford.	842.159.65
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2722-35:

Box 3 x 3	26	0.65	22.00
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2728-80:

Dist'g Gate, Single	60	2.91	82.35
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104.35

2740. Regulating gate, 18 x 42:

Redwood plk. 13	6.48	84.25
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Do. timber 14	2.42	33.90
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Pine 11	6.25	68.75
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Freight & Haul 7.20	15.15	109.10
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Carpenter 7	106.05
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Iron 300	9.00
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Block & Rope 36	4.10
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Freight & Haul 34	1.15
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Earth 70 12	8.40
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424.70

2754-80:

Box 3 x 4	26	0.65	22.00
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2754-95:

Do. Do.	26	0.65	22.00
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2768-30:

Dist'g Gate, Single	60	2.91	82.35
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126.35

2792-60. Dist'g Gate, Triple:

Redwood plk. 13	4.40	57.20
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" Tim. 14	1.80	25.20
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Freight & Haul 7.20	6.20	44.65
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Carpenter 7	43.40
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Iron 116	3.50
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Freight & Haul 34	.40
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Earth 130 12	15.60
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189.95

1246 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

2793-10:

Same as above.....	116	6.20	189.75	
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2803:

Dist'g Gate, Single.....	60	2.91	82.35	
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2810-10:

Box 3 x 3.....	26	0.65	22.00	
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2816-15:

Dist'g Gate, Single.....	60	2.91	82.35	
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2825-50:

Box 3 x 3.....	26	0.65	22.00	
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398.45

2825. Bridge, 18 x 66:

Redwood timber 14.....		2.14	29.95	
Pine 11.....		5.41	59.50	
Freight & Haul. 7.20.....		7.55	54.35	
Carpenter 5.....			37.75	

902	49.99	\$181.55	43,403.45
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1752 Bro't forward.....		\$181.55	\$43,403.45
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Iron 3.....	95		2.75	
Freight & Haul. 34.....			.30	
Earth 80 yds. 8.....			6.40	

191.00

2827-10:

Distrbg. Gate, Triple.....	116	6.20	189.95	
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2827-10:

Do. Do. Do.	116	6.20	189.95	
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2835-70:

Do. Do. Single.....	60	2.91	82.35	
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2846-45:

Box 3 x 3.....	26	0.65	22.00	
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566.60

2852-25:

Dist'g Gate, Single.....	60	2.91	82.35	
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2856-30. Regulating gate, 16 x 42:

Redwood plk. 13.....		7.91	102.80	
Do. timber 14.....		1.62	22.65	

Pine 11	5.67	62.35	
Freight & Haul 7.20	15.20	109.45	
Carpenter Work 7		106.40	
Iron 3	330	9.90	
Blocks & Rope	36	4.10	
Freight & Haul	366	1.25	
Earth 60 yds. 12		7.20	
			426.10

2856-53. Waste gate, 16 x 34:

Redwood plk. 13	4.44	57.75	
Do. timber 14	2.51	35.15	
Pine "	5.29	58.20	
Freight & haul 7.20	12.24	88.10	
Carpenter 7		85.65	
Iron 3	264	7.90	
Blocks & Rope	36	4.10	
Freight & haul 34	300	.95	
Earth 60-12		7.20	
			345.00

2856-70. Regulating gate, 8 x 42:

Redwood plk. 13	5.71	74.25	
Do. timber 14	1.77	24.80	
Pine 11	3.77	41.45	
Freight & haul 7.20	11.25	81.00	
Carpenter 7		78.75	

Forward	1067	57.56	\$300.25	\$44,932.15
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1753 Bro't for'd			\$300.25	\$44,932.15
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Iron 3	282	8.45		
Blocks & Rope	36	4.10		
Freight & Haul. 34	318	1.05		
Earth 100 12		12.00		
				325.85

2876-80:

Dist'g Gate, Triple	116	6.20		189.95
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2876-80. Inlet gate, triple:

Redwood plk. 13	4.64	60.30		
do. timber 14	2.36	33.05		
Freight & Haul. 7.20	7.00	50.40		
Carpenter 5		35.00		
Iron 3	116	3.50		
Ft. & Haul. 34 .....		.40		
Earth 135 12		16.20		
				198.85

2881-95. Bridge, 16 x 63:

Redwood timber 14.....	2.02	28.25	
Pine 11	5.20	57.20	
Freight & Haul. 7.20.....	7.22	52.00	
Carpenter work 5.....		36.10	
Iron 3	116	3.50	
Freight & Haul. 34.....		.40	
Earth 80 @ 8.....		6.40	
			183.85

2893-80. Dist'g Gate, Single.	60	2.91	82.35
2910-60. Do. Do. Do.	60	2.91	82.35

164.70

2911-15. Bridge, 16 x 69:

Redwood timber 14.....	2.34	32.75	
Pine 11	4.76	52.35	
Freight & Haul. 7.20.....	7.10	51.10	
Carpenter 5		35.50	
Iron 3	92	2.75	
Freight & Haul. 34.....		.30	
Earth 80 @ 8.....		6.40	
			181.15

2911-45. Dist'g Gate, Single.	60	2.91	82.35
2928-15. Box	40	1.00	30.00

112.35

942 37.25 \$46,288.85

1754 Bro't for'd \$46,288.85

2936-85. Bridge, 16 x 64:

Redwood Tim. 14.....	1.87	26.20	
Pine 11	4.61	50.70	
Freight & haul. 7.20.....	6.48	46.65	
Carpenter 5		32.40	
Iron 3	97	2.90	
Freight & haul. 34.....		.35	
Earth 80 a 8.....		6.40	
			165.60

2937-65:

Dist'g Gate, single.....	60	2.91	82.35
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2948-85:

Do. Do. Do.	60	2.91	80.60
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2967-60:

Do. Do. Do.	60	2.91	80.60
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243.55

2968. Regulating gate, 16 x 42:

Redwood plk. 13.....	7.59	98.70	
Do. timber 14	2.12	29.70	
Pine 11 .....	....	7.64	84.05	
Freight & haul. 6.60.....	....	17.35	114.50	
Carpenter 7 .....	....	.....	121.45	
Iron 3	318	.....	9.55	
Blocks & Rope.....	36	.....	4.10	
Freight & haul. 29.....	354	.....	1.05	
Earth 100-12	12	.....	12.00	
				475.10

2981-80:

Box 2 x 4.....	26	0.65	21.60	
" 2 x 5.....	26	0.65	21.60	

3003-50:

Dist'g Gate, single.....	69	2.91	80.60	
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3027-85:

Do. Do. Do.	60	2.91	80.60	
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3048-90:

Box 2 x 4.....	26	0.65	21.60	
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3063-75:

Do. Do.	26	0.65	21.60	
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3069-65:

Dist'g Gate, Single.....	60	2.91	80.60	
				328.20

3070-10. Regulating gate, 9 x 40:

Redwood plk. 13.....	5.06	65.80	
Do. timber 14 .....	....	2.66	37.25	
Pine 11 .....	....	3.62	39.80	
Freight & haul. 6.60.....	11.34	74.85	
Carpenter 7	79.50	

Forward	879	55.23	\$297.20	47,501.30
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1755 Bro't for'd			297.20	47,501.30
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Iron 3	230	6.90	
Blocks & Rope.....	36	4.10	
Freight & haul. 29.....	26675	
Earth 60 a 12.....	7.20	316.15

3078-40. Bridge, 16 x 66:

Redwood timber 14	2.79	36.25
Pine 11	5.94	65.35
Freight & haul. 6.60	8.73	57.60
Carpenter 5		43.65
Iron	112	3.35
Freight & haul. 2935
Earth 80 a 8		6.40

212.95

3079-37:

Dist'g Gate, Single	60	2.91	80.60
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3094-50:

Do. Do. Do.	60	2.91	80.60
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3119-40:

Box 3 x 3	26	0.65	21.60
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3125-40:

Dist'g Gate, Single	60	2.91	80.60
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3136-20:

Box 3 x 3	26	0.65	21.60
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3155-55:

Dist'g Gate, Single	60	2.91	80.60
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3158-85:

Box 3 x 3	26	0.65	21.60
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3170-70:

" "	26	0.65	21.60
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3179:

Dist'g Gate, Single	60	2.91	80.60
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489.40

3179-60. Regulating gate, 16 x 42:

Redwood plk. 13	10.42	135.50
Do. tim. 14	0.94	13.15
Pine 11	4.71	51.80
Freight & haul. 6.60	16.07	106.05
Carpenter 7		112.50
Iron 3	287	8.60
Blocks & Rope	36	4.10
Freight & haul. 29	323	.95
Earth 90 a 12		10.80

443.45

3192-10:

Dist'g Gate, Single.....	60	2.91	80.60	
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3192-45:

Inlet Gate, do.	50	4.00	108.65	189.25
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Forward	1143	48.86	49,152.50
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1756 Bro't for'd				\$49,152.50
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3202-90:

Box 4 x 4.....	40	1.00	29.40	
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3218-50:

Do. 2 x 2.....	15	0.30	10.00	
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3224:

Do. 3 x 3.....	26	0.65	21.60	
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3237-40:

Distg. Gate, Single.....	60	2.91	80.60	
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141.60

3253-35. Bridge, 16 x 66:

Redwood timber 14.....	2.24	31.35	
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Pine 11	5.90	64.90	
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Freight & Haul. 6.60.....	8.14	53.70	
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Carpenter 5	40.70	
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Iron 3	140	4.20	
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Freight & Haul. 29.....40	
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Earth 80 @ 8.....	6.40	
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201.65

3252-80:

Box 3 x 5.....	40	1.00	29.40	
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3278-10:

Distg. Gate, Single.....	60	2.91	80.60	
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3283-70:

Do. Do. Do.	60	2.91	80.60	
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3302-40:

Box 3 x 3.....	26	0.65	21.60	
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212.20

3303. Regulating gate, 16 x 40:

Redwood plk. 13.....	7.97	103.60	
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do. tim. 14	1.86	26.05	
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1252 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. V8.

Pine 11	5.40	59.40	
Freight & Haul. 6.30.....	15.23	95.95	
Carpenter 7		106.60	
Iron 3	287	8.60	
Blocks & Rope.....	36	4.10	
Freight & Haul. 29.....	326	.95	
Earth 90 @ 12.....		10.80	
			416.05
3317-15:			
Box 3 x 3.....	26	0.65	21.40
3314-20:			
Distg. Gate, Single.....	60	2.91	79.70
3356-60:			
Do. Do. Do.	60	2.91	79.70
3362:			
Box 3 x 3.....	26	0.65	21.40
3366-80:			
Distg. Gate, Single.....	60	2.91	79.70
3378-50:			
Do. Do. Do.	60	2.91	79.70
3393:			
Box 4 x 4.....	40	1.00	29.20
			390.80
Forward	1086	49.64	50,514.80
1757 Bro't for'd			\$50514.80
3409-70:			
Distg. Gate, Single.....	60	2.91	79.70
3409-50:			
Box 3 x 3.....	26	0.65	21.40
			101.10
3410-5. Regulating gate, 16 x 35:			
Redwood plk. 13.....		7.97	103.60
Do. timber 14		1.86	26.05
Pine 11		5.40	59.40
Freight & Haul. 6.30.....		15.23	95.95
Carpenter 7			106.60
Iron 3	287		8.60
Blocks & Rope.....	36		4.10
Freight & Haul. 29.....	323		.95
Earth 90 @ 12.....			10.80
			416.05

3432-55. Bridge, 16 x 60:

Redwood timber 14	2.16	30.25
Pine 11	5.40	59.40
Freight & Haul. 6.30.....	7.56	47.60
Carpenter 5		35.80
Iron 3		3.60
Freight & haul. 29.....		.35
Earth 80 @ 8¢.....		6.40

 183.40
3452-80:

Distg. Gate, Single.....	60	2.91	79.70
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3474-10:

Do. Do. Do.	60	2.91	79.70
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3489-55:

Box 3 x 3.....	26	0.65	21.40
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 180.80
3489-90. Bridge, 16 x 60:

Redwood timber 14.....	2.12	29.70
Pine 11	5.04	55.45
Freight & Haul. 6.30.....	7.16	45.10
Carpenter wk. 5.....		35.80
Iron 3	127	3.80
Freight & Haul. 29.....		.40
Earth 80 @ 8.....		6.40

 176.65
3509-80:

Box 3 x 3.....	26	0.65	21.40
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2509-80:

Inlet Gate, Single.....	50	4.00	108.65	130.05
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Forward	838	44.63		51,702.85
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1758 Bro't for'd				\$51702.85
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3510-30:

Distg. Gate, Single.....	60	2.91	79.70
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3520-60:

Box 3 x 5.....	40	1.00	29.20
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3522-90:

Do. 4 x 5.....	50	1.30	36.50
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3540-53:

Distg. Gate, Single.....	60	2.91	79.70
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 225.10

3541-10. Waste gate, 16 x 16:

Redwood plk. 13.....	5.15	66.95	
Do. timber 14.....	5.00	70.00	
Pine 11.....	3.72	40.90	
Freight & Haul. 6.30.....	13.87	87.40	
Carpenter 7.....		97.10	
Iron 3.....	260	7.80	
Block & Rope.....	36	4.10	
Freight & Haul. 29.....	296	.90	
Earthwork 100 @ 12.....		12.00	
			387.15
			52315.10

3557. Regulating gate, 17 x 34:

Redwood plk. 13.....	10.84	140.90	
do. tim. 14.....	6.47	90.60	
Pine 11.....	8.92	98.10	
Freight & Haul. 6.30.....	26.23	165.25	
Carpenter 7.....		183.60	
Iron 3.....	484	14.50	
Blocks & Rope.....	36	4.10	
Freight & Haul. 29.....	520	1.55	
Earthwork 100 @ 12.....		12.00	
			710.60

3558-80. Regulating gate, 17 x 34:

Same as above.....	484	26.23	710.60
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3592-35:

Distg. Gate, Single.....	60	2.91	79.70
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3600:

Box 3 x 3.....	26	0.65	21.40
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3603-05:

Distg. Gate, Single.....	60	2.91	79.70
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3603-30:

Do. Do. Do.	60	2.91	79.70
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3605-65:

Do. Do. Do.	60	2.91	79.70
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3613-90:

Box 3 x 3.....	26	0.65	21.40
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3624-80:

Distg. Gate, Single.....	60	2.91	79.70	441.30
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Forward	1790	90.40	54,177.60
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1759 Bro't for'd \$54177.60

3637-15. Bridge, 18 x 60:

Redwood Timber 14.....	2.34	32.75
Pine 11	4.68	51.50
Freight & Haul. 6.00.....	7.02	42.10
Carpenter 5		35.10
Iron 3		3.60
Freight & Haul. 25.....		.30
Earth 80 @ 8.....		6.40

171.75

3645-40:

Distg. Gate, Single.....	60	2.91	78.85
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3649-70:

Box 3 x 3.....	26	0.65	21.25
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3661-95:

Distg. Gate, Single.....	60	2.91	78.85
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3666-45:

Box 3 x 3.....	26	0.65	21.25
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3677-75:

Distg. Gate, Single.....	60	2.91	78.85
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3689-85:

Do. Do. Do.	60	2.91	78.85
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3696-25:

Box 3 x 3.....	26	0.65	21.25
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379.15

3696-70. Regulating gate, 16 x 35:

Redwood plk. 13.....	5.32	169.15
do. tim. 14	3.17	44.40
Pine 11	5.34	58.75
Freight & Haul. 6.....	13.83	87.10
Carpenter 7		96.80
Iron 3	234	7.00
Blocks & Rope.....	36	4.10
Freight & Haul. 25.....	270	.70
Earth 80 @ 12.....		9.60

477.60

3710-38:

Distribg. Gate, Single.....	60	2.91	78.85
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3727-75:

Do. Do. Do.	60	2.91	78.85
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3741-20:

Box 2 x 3..... 20 0.40 15.00

3755-20:

Distg. Gate, Single..... 60 2.91 78.85

End:

Do. Do. Do. 60 2.91 78.85

330.40

932 46.48 \$55,536.50

Total Iron lbs.... 30,551

" Lumber.... 1,689,410 ft. B. M.

(Add) (692.)
(1,124.)
()
(57,352.50)

1760

Iron.

Lumber.

To Los Banos 57.967 miles built
1873 #15,868 936,720 \$34,697.40

To Oristimba 28.868 miles built
in 1878..... 12,431 632,660 17,617.70

To End of Canal, 4.10 miles
built in 1884..... 2,252 114,890 3,221.40

Total..... 30,551 1,689,410 \$55,536.50

(5.14)
()
(1684.270)

R. H. GOODWIN,
Consulting Engineer.

(Endorsed:) Filed May 14, 1910. Southard Hoffman, Clerk, by
J. A. Schaertzer, Deputy Clerk.

1761

DEF'TS' EXHIBIT C.

Memorandum as to Election of Trustees of the San Joaquin & Kings River Canal & Irrigation Co.

- December 4th, 1877. Joseph Sedgley, Michael Reese, Jesse S. Potter, Henry Miller, Chas. Lux, Samuel Crim, William Center.
- December 3rd, 1878. Joseph Sedgley, Jesse S. Potter, Chas. Lux, Samuel Crim, William Center, Joseph Rosenberg, John H. Bolton.
- December 2nd, 1879. Joseph Sedgley, Jesse S. Potter, J. C. Wilmerding, Henry Pierce, Chas. Lux, William Center, Joseph Rosenberg.
- December 7th, 1880. Chas. Baum, Henry Pierce, Joseph Rosenberg, Joseph Sedgley, Chas. Lux, Jesse S. Potter, J. C. Wilmerding.
- December 6th, 1881. Chas. Baum, Joseph Sedgley, Chas. Lux, J. C. Wilmerding, Henry Pierce, Joseph Rosenberg, J. S. Potter.
- December 5th, 1882. Chas. Lux, J. C. Wilmerding, Jesse S. Potter, Chas. Baum, Joseph Sedgley, Joseph Rosenberg, Henry Pierce.
- December 4th, 1883. Chas. Lux, Joseph Rosenberg, William Center, D. E. Martin, J. C. Wilmerding, Henry Pierce, Jesse S. Potter.
- December 2nd, 1884. William Center, Chas. Lux, D. E. Martin, Jesse S. Potter, Joseph Rosenberg, J. C. Wilmerding, E. L. Woods.
- December 1st, 1885. William Center, D. E. Martin, J. C. Wilmerding, Chas. Lux, E. L. Woods, Jesse S. Potter, John H. Bolton.
- December 7th, 1886. John H. Bolton, William Center, Chas. Lux, D. E. Martin, Jesse S. Potter, W. H. Talbot, J. C. Wilmerding.
- December 6th, 1887. John H. Bolton, E. T. Allen, William Center, D. E. Martin, Jesse R. Porter, W. H. Talbot, J. C. Wilmerding.
- December 4th, 1888. E. T. Allen, William Center, D. E. Martin, J. Leroy Nickel, Jesse S. Potter, W. H. Talbot, J. C. Wilmerding.
- December 3rd, 1889. E. T. Allen, D. E. Martin, Jesse S. Potter, William Center, W. H. Talbot, J. Leroy Nickel, J. C. Wilmerding.
- December 2nd, 1890. E. T. Allen, D. E. Martin, J. Leroy Nickel, Jesse S. Potter, Henry Miller, W. H. Talbot, J. C. Wilmerding.
- December 1st, 1891. E. T. Allen, Jesse S. Potter, J. Leroy Nickel, D. E. Martin, Henry Miller, W. H. Talbot, J. C. Wilmerding.

December 6th, 1892. Same.

December 5th, 1893. E. T. Allen, Jesse S. Potter, J. Leroy Nickel,
D. E. Martin, Thomas J. Lamb, W. H.
Talbot, Henry Miller.

December 4th, 1894. E. T. Allen, Jesse S. Potter, J. Leroy Nickel,
D. E. Martin, Henry Miller, W. H. Tal-
bot, D. Henshaw Ward.

December 19th, 1895. Same.

December 1st, 1896. "

December 7th, 1897. "

December 6th, 1898. "

December 5th, 1899. E. T. Allen, T. B. Bishop, D. E. Martin,
Henry Miller, J. Leroy Nickel, W. H.
Talbot, D. H. Ward.

1762

December 18th, 1900. Same.

December 3rd, 1901. "

December 2nd, 1902. "

December 1st, 1903. E. T. Allen, Thomas B. Bishop, Louis F.
Monteagle, Henry Miller, W. H. Talbot,
J. Leroy Nickel, D. Henshaw Ward.

December 6th, 1904. Same.

June 12th, 1905. D. Henshaw Ward resigned. J. E. Bell was
elected to fill vacancy.

* * * * *

*Memorandum of Election of Trustees of the San Joaquin & Kings
River Canal & Irrigation Company, Incorporated.*

June 14th, 1905. E. T. Allen, J. E. Bell, Thomas B. Bishop,
Henry Miller, Louis F. Monteagle, J.
Leroy Nickel, W. H. Talbot.

December 5th, '05. Same.

June 28th, 1906. Azro N. Lewis, elected to fill vacancy caused
by the death of Thomas B. Bishop.

December 4th, 1906. E. T. Allen, J. E. Bell, Azro N. Lewis, Henry
Miller, J. Leroy Nickel, W. H. Talbot,
Louis F. Monteagle.

December 3rd, 1907. E. T. Allen, Louis F. Monteagle, Henry
Miller, J. Leroy Nickel, Azro N. Lewis,
F. C. Talbot, W. H. Talbot.

Endorsed: No. 14554. U. S. Circuit Court, Northern District
of California. The San Joaquin and K. R. C. & I. Co. vs. The
County of Stanislaus et al. Def'ts' Exhibit C. E. H. H. Master,
etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A.
Schaertzer, Deputy Clerk.

1763

DEF'TS' EXHIBIT D.

Maintenance Account of the San Joaquin & Kings River Canal & Irrigation Company, Incorporated, for Year Ending November 25th, 1907.

Expense General	\$1,379.35
Expense—Automobile	463.48
Horses & Feed	3,469.06
Household Furniture	229.68
Instruments & Office Furn.....	87.85
Lumber & Piles.....	743.27
Subsistence	3,608.25
Telephone Instruments & Expense.....	591.84
Tools and Machinery.....	729.49
Vehicles and Harness.....	623.88

Canal Cleaning—Balance:

'06, '07 Work, a/c.....	\$6500	
'07, '08 Work	8977.26	
		15,477.26

Dredge Repairs & Maintenance.....	1,975.85
Expense,—S. F. Office.....	906.41
Rent,—S. F. Office.....	800.00
Salaries	7,494.40
Labor	10,007.35
Resurveying and Mapping.....	2,306.59
Tax	8,669.95
Legal Expense	6,045.38
Water Rates	3,554.57
Water Rates—New Proceedings.....	752.05
Damage Claims	100.00
Measuring Boxes	594.34
Repairs to Headworks.....	750.43
Parallel Canal Weir.....	10.00
Poso Headgate and Weir.....	1,537.57
Repairs to Los Banos Creek Weir.....	682.59
San Luis Outside Weir.....	300.88
	<hr/> \$73,891.77

Endorsed: No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Def'ts' Exhibit D. E. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

This agreement, made this 4th day of December, 1905, by and between The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, a corporation, the party of the first part, Miller & Lux, Incorporated, a corporation, the party of the second part, and Las Animas and San Joaquin Land Company, Incorporated, a corporation, the party of the third part, witnesseth:

That whereas the parties of the second and third parts are each owners of lands bordering upon the San Joaquin River, and which touch the waters thereof and are riparian thereto, and are entitled to divert water from said river for the irrigation of their lands:

And whereas the said parties of the second and third parts each desire to divert water from said river at a point above the dam or weir of the party of the first part and within the pond or reservoir caused by said dam, and thereby to avail themselves of the benefit of the raising of the water of said river by said dam or weir; and it is equitable that said parties of the second and third part should compensate the party of the first part for the benefit so to be obtained by them respectively from said dam or weir:

And whereas the said parties of the second and third parts are not now provided with sufficient canal systems to carry the said water to all portions of their said lands, and they desire that, pending the completion of their said canal systems, the party of the first part should conduct and carry through its canals some portion of the water so diverted by said parties of the second and third parts or by one of them:

And whereas, by reason of the decision which has been announced by the Superior Court of Merced County in the action brought by J. J. Stevinson against the party of the first part, it appears that the quantity of water which the party of the first part will hereafter be allowed to divert from said river will be less than the capacity of its canals, and will be less than sufficient to enable the party of
1765 the first part to supply all the necessary demands of its present consumers:

And whereas the parties of the second and third parts are willing, in the event that the party of the first part will allow them the aforesaid use of its dam or weir or canals, to assist in relieving the party of the first part, by irrigating their riparian lands with water diverted by them as aforesaid,—thus permitting the party of the first part to use the water diverted by it for the irrigation of non-riparian lands:

And whereas the parties of the second and third parts have commenced the construction of a certain canal called the Helm Canal, and have partly completed the same, which canal, in part, encroaches upon the right of way of the party of the first part for and appurtenant to its main canal, and it may be necessary for said parties of the second and third parts to further encroach upon the said right of way of the party of the first part in the construction of said Helm Canal.

Now therefore it is hereby agreed by and between the parties hereto as follows:

1. That said party of the first part hereby agrees that the said parties of the second and third parts may maintain the said Helm Canal in the said location where it is at present constructed, without objection on account of the encroachment thereof upon the right of way of the party of the first part, and may, should the same be found necessary in its further construction, construct the same in whole or in part upon the right of way of the party of the first part, upon condition, however, that the said parties of the second and third parts shall assume and undertake to keep the bank of the main canal of the party of the first part nearest to said Helm Canal, wherever the said Helm Canal shall encroach upon said right of way, in good order and repair at their own expense, and shall indemnify and save harmless the party of the first part from all or any loss or damage that

may result from said construction of said Helm Canal and
1766 from any breakage or impairment of said bank; and the said parties of the second and third parts do hereby undertake and agree to keep the said bank of the main canal of the party of the first part, wherever the said Helm Canal shall encroach upon said right of way, in good order and repair, at their own expense, and shall and will indemnify and save harmless the party of the first part from all or any loss or damage that may result from said construction of said Helm Canal, and from any breakage or impairment of said bank; provided, however, that nothing herein contained shall be so construed as to require the parties of the second and third parts, or either of them, to clean the said main canal of the party of the first part, or to remove any accretions or growth which may form on that slope of said bank which is nearest to the water of said main canal.

2. The said party of the first part hereby agrees that the parties of the second and third parts, or either of them, may at any time divert from the said San Joaquin River at any point above the dam or weir of the party of the first part, and within the flowage of said dam or weir, any water not belonging to the party of the first part and which it is not entitled to divert from said river, or which, at the time, it does not desire to divert from said river; on condition, however, that the said parties of the second and third parts do apy to the party of the first part, annually, their reasonable share of the annual expense of said dam or weir, to be ascertained as follows:

The total annual expense of said dam or weir is hereby fixed and agreed upon to be the sum of twenty-two hundred dollars (\$2200.00); and said sum is to be apportioned between the parties hereto in proportion of the respective amounts of water severally diverted by them during the year ending on the 15th day of November then next preceding, and the said parties of the second and third parts hereby promise and agree to pay their said annual proportion, on demand, as soon as the same shall have been so ascertained.

1767 3. The said party of the first part hereby agrees that, upon the request of the parties of the second and third parts, or either of them, at any time when the same can be done without in-

jury to its business or to its customers, it will carry and conduct through its canals, between such points as may be designated or requested by said parties of the second and third parts or either of them, any water diverted by the parties of the second and third parts or either of them;—the said parties of the second and third parts to pay for such service at the rate of one half of one cent for each twenty-four hours, for each second foot of water for each mile that the same is so carried. The necessary loss in transit by evaporation and seepage is hereby estimated and agreed upon as one per cent per mile; and the quantity which the party of the first part shall deliver to the parties of the second and third parts shall be the amount turned into its canal by said parties of the second and third parts, less one per cent for each mile that the same is so carried.

4. Inasmuch as the rates hereby agreed upon to be paid by the parties of the second and third parts to the party of the first part, and the percentage of loss by evaporation and seepage, are based upon estimates made upon the best information now obtainable, but may be found hereafter to require alteration, it is further agreed that either party hereto may require the said rates and percentage to be readjusted at the end of any year, upon giving six months prior notice of such requirement.

In witness whereof, the parties hereto have caused these presents to be subscribed by their respective presidents and secretaries, and their respective corporate seals to be hereunto affixed, all on 1768 the day and year first above written. Executed in triplicate.

THE SAN JOAQUIN & KINGS RIVER
CANAL & IRRIGATION COMPANY,
INCORPORATED.

By HENRY MILLER, *President*, and

[CORPORATE SEAL.] C. Z. MERRITT, *Secretary*.

[Seal The San Joaquin & Kings River Canal & Irrigation
Company, Incorporated.]

MILLER & LUX, INCORPORATED,

By HENRY MILLER, *President*.

[CORPORATE SEAL.] DAVID BROWN, *Secretary*.

[Seal Miller & Lux, Incorporated, Incorporated June 13,
1905.]

LAS ANIMAS & SAN JOAQUIN LAND
COMPANY, INCORPORATED,

By HENRY MILLER, *President*.

[CORPORATE SEAL.] DAVID BROWN, *Secretary*.

[Seal Las Animas & San Joaquin Land Company, Incorporated,
Incorporated June 13, 1905.]

(Original acknowledged by the 3 corporations before Geo. T. Knox, Not'y Pub. on 4th Jan'y 1903.)

1769 (Endorsed:) "Agreement between The San Joaquin and
Kings River Canal and Irrigation Company, Incorporated,

Miller & Lux, Incorporated, and Las Animas and San Joaquin Land Company, Incorporated. Dated December 4, 1905. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin & K. R. C. & I. Co. vs. The County of Stanislaus et al. Def'ts' Exhibit E. E. H. H., Master." Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1770

DEF'TS' EXHIBIT F.

San Joaquin & Kings River Canal & Irrigation Co., Inc.

Legal Expense Account for Year Ending November 25, 1906.

Stevinson vs. Canal Co.	all	2688.87
Canal Co. v. Borland	"	9000.—
Water Rate Contest	"	1599.72
Canal Co. vs. Enterprise C. & L. Co.	1/2	1155.10
Canal Co. vs. Fresno F. & I. Co.	1/2	668.25
Calif. Past. & Agr. Co. v. James Canal	1/2	456.24
Calif. Past. & Agr. Co. vs. Miller & Lux and Canal Co.	1/2	398.52
Turner Estate vs. Borland	1/2	784.78
Turner Estate vs. Enterprise C. & L. Co.	1/2	672.56
Miller & Lux et al. vs. Stevenson	2/3	1552.92
Eastwood and North Fork Agreements	3/4	1380.47
Miller & Lux a/c expenses accrued and unpaid at date of annual meeting, the items being in- cluded in fiscal year 1907		1813.62
General Services—record lost in fire	all	1309.15
" "	"	1396.95
		<hr/> 24877.15

Credits:

Canal vs. Enterprise C. & L. Co.	1000.—	
" " Fresno F. & I. Co.	1500.—	2500.—
	<hr/>	<hr/> 22377.15

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus et al. Def'ts' Exhibit F. E. H. H. Master etc. Filed May 14, 1910. Southard Hoffman, Clerk. By J. A. Schaertzer, Deputy Clerk.

This Agreement, made this 22nd day of September, 1906, by and between the Borland Land Company, a corporation, the party of the first part, and The San Joaquin & Kings River Canal & Irrigation Company, Incorporated, a corporation, the party of the second part, Witnesseth:

Whereas the parties hereto have certain disputes and differences as to their respective rights in and to the waters of the San Joaquin River, Kings River, and Fresno Slough, and desire hereby to settle and adjust said differences for all times.

Now, therefore, in consideration of the premises and of the sum of nine thousand dollars (\$9000.) in gold coin of the United States, this day paid by the party of the second part to the party of the first part, the receipt whereof is hereby acknowledged, it is hereby agreed between the parties hereto, and it is admitted by the said party of the first part, that the said party of the second part has the right at all times to divert from said San Joaquin River, said Kings River, and said Fresno Slough, or from either of them as much as twelve hundred (1200) cubic feet of water per second, and to carry the same to and upon lands, whether or not riparian to either of said streams, for the purpose of the irrigation thereof, and for domestic and other purposes.

In Witness Whereof the parties hereto have caused their respective Presidents and Secretaries to execute this agreement under the respective corporate seals of said parties, all on the day 1772 and year first above written.

[SEAL.] By BORLAND LAND COMPANY,
A. BORLAND, *President*, and
HUGH T. GOWER, *Secretary*,
THE SAN JOAQUIN & KINGS RIVER
CANAL & IRRIGATION COMPANY,
INCORPORATED,
[SEAL.] By HENRY MILLER, *President*, and
C. Z. MERRITT, *Secretary*.

(Endorsed:) Agreement. Borland Land Company with The San Joaquin & Kings River Canal & Irrigation Co., Incorporated. Dated September 22nd, 1906. No. 14554. In U. S. Circuit Court. Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Deft's Exhibit G. E. H. H., Master, etc. Filed May 14, 1910, Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1773

DEF'TS' EXHIBIT H.

San Joaquin & Kings River Canal & Irrigation Co., Inc.

Legal Expense Account for Year Ending November 25, 1907.

Water Rate Contest	all	4659.57
Stevinson vs. Canal Co.	"	1900.85
Canal Co. vs. Borland	1/2	134.88
" " " Enterprise C. & L. Co.	1/2	1125.81
" " " Fresno F. & L. Co.	1/2	52.49
Calif. Past. & Agr. Co. vs. James Canal	1/2	307.64
" " " " M. & L.) and Canal Co.)	1/2	791.20
" " " vs. Borland	1/2	175.-
Turner Estate vs. Borland	1/2	75.-
" " " Enterprise C. & L. Co.	1/2	313.10
M. & L. Inc. &c. vs. Stevenson	1/2	3772.
Sundry Items	all	267.93
		<hr/>
		13575.47

Credits:

Amount paid to Miller & Lux in fiscal year 1906 (as per statement,) on ac- count of above item	1813.62	
Balance due Miller & Lux, included in above statement, unpaid	1409.85	3223.47
		<hr/>
		10352.00

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & L. Co. vs. The County of Stanislaus et al. Def't's Exhibit H. E. H. H. Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk. By J. A. Schaertzer, Deputy Clrk.

1774

DEF'TS' EXHIBIT I.

Memorandum of Agreement, made this 29th day of June, 1908, between The San Joaquin & Kings River Canal & Irrigation Company Incorporated, the party of the first part, and Miller & Lux Incorporated, the party of the second part, Witnesseth:

Whereas, the party of the second part has heretofore constructed a ditch leading from Siphon No. 4 of the canal of the party of the first part, in section eight (8) Township Nine (9) South, Range Nine (9) East, Mount Diablo Base and Meridian, and running thence easterly through the center of section nine, and thence North-erly along the Easterly line of sections nine (9) and four (4); and thence Easterly along the Northerly line of Section three (3) in

said Township and Range, for the purpose of draining waste water which accumulated on the land west of said canal, and for other purposes, and the party of the first part has contributed the sum of Three Hundred Ninety-seven Dollars and Eighty-three cents, being one-fourth of the cost of the construction thereof, for the purpose of relieving said land from damage caused by said waste water; and

Whereas, the party of the second part now desires to use said ditch as an irrigating ditch as well as for the purpose of drainage, as aforesaid.

Now, Therefore, in consideration of the premises, it is agreed that the party of the second part shall, and hereby does, relieve the party of the first part from any liability to hereafter maintain said ditch, and also relieves the party of the first part from any liability to it for damages to said land by accumulation of said waste waters aforesaid, and the party of the first part will permit the party of the second part to use said ditch as a waste ditch and also as an irrigation ditch for its own lands at its pleasure; and in consideration of the premises the party of the first part waives and relinquishes any other interest it might have in said ditch.

In Witness Whereof the parties hereto have caused these presents to be executed by their respective Vice Presidents and Secretaries the day and year first above written.

THE SAN JOAQUIN & KINGS RIVER
CANAL & IRRIGATION COMPANY,
INCORPORATED,

By J. LEROY NICKEL,

Vice President.

By C. Z. MERRITT, *Secretary.*

MILLER & LUX, INCORPORATED,

By HENRY MILLER, *President.*

[SEAL.]

By DAVID BROWN, *Secretary.*

Endorsed: 10-17H. The San Joaquin and Kings River Canal and Irrigation Co. Incorporated, with Miller & Lux Incorporated. Agreement as to Ingomar Waste Ditch. Dated June 29, 1908. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts' Exhibit I. E. H. H. Master etc. Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1776

DEFENDANTS' EXHIBIT K.

Intake of the Main and Helm Canals for the Season of 1907-1908. R. P. Mc.

1777

Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1907.	Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1907.
118859	6480	125339	July 1	111266	7495	118761	Aug. 1
111301	6480	117781	2	114120	7495	121615	2
111301	6480	117781	3	114120	7495	121615	3
111301	6480	117781	4	114120	7495	121615	4
123711	6480	130191	5	102726	7495	110221	5
121181	6480	127661	6	110763	7495	118258	6
123711		123711	7	112653	6480	119133	7
111301		111301	8	110763	6480	117243	8
118470		118470	9	105561	6480	112041	9
117509		117509	10	100584	7495	108079	10
120643		120643	11	100584	7495	108079	11
118470		118470	12	100584	7495	108079	12
116880		116880	13	105890	6480	112370	13
118470		118470	14	104931	6480	111411	14
118470		118470	15	107320	6480	113800	15
123551		123551	16	107320	6480	113800	16
122854		122854	17	107320	6480	113800	17
122854		122854	18	106634	4320	110954	18
123460		123460	19	107520	6480	114000	19
122854	7495	130349	20	112563	6480		20
122854	7495	130349	21	112000	7495		21
123460	7495	130955	22	111581	7495		22
117005	7495	124500	23	110736	7495		23

Water Turned Out

Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1907.	Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1907.
97217	7495	104712	24	111200	7495		24
106237	7495	113732	25	111700	6480		25
110836	7495	118331	26	112300	7797		26
110836	7495	118331	27	112804	8100		27
113202	7495	120697	28	104754	7495		28
108502	7495	115997	29	104069	7646		29
111266	7495	118761	30	101493	7495		30
117652	7495	125147	31	107423	7495		31
1778							
103400	6480		Sept. 1	39678			Oct. 4
99397	6480		2	34953			5
71327	5292		3	33101			6
	5292		4	33101			7
	5724		5	43587			8
	5724		6	42435			9
	6480		7	46458			10
	6480		8	46458			11
	5724		9	44726			12
	4320		10	43587			13
	9547		11	43587			14
	9180		12	43213			15
	10152		13	43441			16
	10368		14				17
	6113		15	Water			18
	7495		16	Backed Up			19
	7495	59740	17				20
	6180		18				21
52245							
Average							

Average	6480	7495	7495	7495	8100	8100	62633	Water Turned Out	19	35728	22
									20	36851	23
54533	54533	54533	54533	54533	54533	54533	54533	54533	21	37987	24
									22	39600	25
52787	49425	44580	42623	1779	52787	49425	44580	42623	23	40244	26
									24	39136	27
52787	49425	44580	42623	1779	52787	49425	44580	42623	25	38675	28
									26	41975	29
52787	49425	44580	42623	1779	52787	49425	44580	42623	27	43865	30
									28	46805	31
52787	49425	44580	42623	1779	52787	49425	44580	42623	Oct.	47302	Nov.
52787	49425	44580	42623	1779	52787	49425	44580	42623	1	48006	1
									2	49312	2
52787	49425	44580	42623	1779	52787	49425	44580	42623	3	50075	3
									4		4
52787	49425	44580	42623	1779	52787	49425	44580	42623	5		5
52787	49425	44580	42623	1779	52787	49425	44580	42623	Nov.	27017	Dec.
52787	49425	44580	42623	1779	52787	49425	44580	42623	6	27087	9
									7	26856	10
52787	49425	44580	42623	1779	52787	49425	44580	42623	8	26856	11
									9	26856	12
52787	49425	44580	42623	1779	52787	49425	44580	42623	10	27058	13
									11	27037	14
52787	49425	44580	42623	1779	52787	49425	44580	42623	12	26856	15
										26856	16

Main canal at set point.	Helm canal.	Total sec. ft.	Date, 1907.	Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1908.
Water Backed Up							
35429			13	27151			17
33322			14	26980			18
31864			15	27151			19
30071			16	27151			20
.....			17	26955			21
.....			18	26955			22
.....			19	26955			23
.....			20	26828			24
.....			21	27151			25
.....			22	27747			26
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.....			24	28383			28
.....			25	28561			29
.....			26	29783			30
.....			27	26371			31
* 6500			28				
* 19000			29				
* 25000			30				
* 26000			Dec. 1				
26300			2				
27131			3				
27058			4				
26856			5				
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27037			7				
27058			8				
27720							

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Water Backed Up

Jan. 1 3735
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Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1908.	Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1908.
"			28	49393	9914	59307	29
"			29		9914		March 1
"			30		9914		2
"			31				
1781							
44400	9914	54314	March 3	98674	8650	107324	April 4
44400	9914	54314	4	98674	8650	107324	5
35434	9914	46348	5	109299	8650	117949	6
35434	9914	46348	6	83537	8650	92187	7
35434	9914	46348	7	78352	40400	118752	8
52704	8662	61366	8	79217	41927	121144	9
44400	8662	53062	9	77495	43300	120795	10
	8662		10	77059	44800	121859	11
	8662		11	74901	46300	121201	12
	8662	53062	12	75473	47800	123273	13
40500	8662	49162	13	76740	49234	125974	14
47000	8662	55662	14	76413	49600	126013	15
53500	8662	62162	15	76740	50000	126740	16
60000	8662	68662	16	76740	50400	127140	17
46994	8650	55644	17	76740	50800	127540	18
51917	8650	60567	18	78532	51200	129732	19
46994	8650	55644	19	76740	51600	128340	20
59610	8650	68260	20	71927	52132	124059	21
35330	8650	43980	21	76740	52200	128940	22
35330	8650	43980	22	79504	52300	131804	23
46994	8650	55644	23	76740	52400	129140	24

38700	9650	47350	24	77649	52500	130149	25
30400	8650	39050	25	72169	52700	124869	26
71900	8650	80550	26	77640	52900	130540	27
80200	8650	88850	27	70433	53084	123517	28
80200	8650	88850	28	70433	53084	123517	29
121400	8650	130050	29	70500	52132	122632	30
104833	8650	113483	30	70433	49452	119885	1
120221	8650	128871	31	72169	51186	123355	2
109299	8650	117949	April 1	70433	52136	122569	3
98674	8650	107324	2	70433	55350	125783	4
98674	8650	107324	3	69847	55350	125197	5
1782							
69062	54900	124862	May 6	77090	53533	130623	June 7
69062	54900	124862	7	76476	54561	131037	8
70076	55350	125426	8	76981	56347	133328	9
71306	54900	126206	9	76981	59161	136142	10
72171	54900	127071	10	76720	56347	133067	11
72298	57150	129448	11	76981	56347	133328	12
74932	56548	131480	12	76981	59161	136142	13
74284	55529	129813	13	77142	56347	133489	14
74932	58758	133690	14	76981	56347	133328	15
74932	57150	132082	15	75230	54816	130046	16
74932	57784	132716	16	75230	59161	134391	17
74932	57150	132082	17	75230	56347	131577	18
74932	57150	132082	18	75230	56347	131577	19
74932	55529	130461	19	75230	56347	131577	20
74932	56124	131056	20	75230	59161	134391	21
75582	54561	130143	21	75230	56347	131577	22
74862	54941	129803	22	75330	55026	130356	23

Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1908.	Main canal at 1st point.	Helm canal.	Total sec. ft.	Date, 1908.
75582	53741	129323	23	75700	55626	131326	24
75582	53741	129323	24	76214	54781	130995	25
75582	53741	129323	25	77100	55873	132973	26
77314	53277	130591	26	76900	53533	130433	27
76476	50736	127212	27	77700	52753	130453	28
76476	53277	129753	28	78600	52753	131353	29
76045	53277	129322	29	79300	53800	133100	30
76476	53277	129753	30				
75226	53277	128503	31				
76476	53277	129753	June 1				
75531	54561	130092	2				
75631	53533	129164	3				
75631	53277	128808	4				
75631	54561	130192	5				
76476	53277	129753	6				

1783 The following summary tags are attached to this exhibit:

Helm, 07-8.

July	1,288.20	Jan'y	7,924.82
Aug.	2,190.63	Feb'y	8,572.87
Sept.	1,699.91	Mar.	16,942.22
Oct.	588.39	Apr.	24,425.08
Feb'y	2,007.93	May	22,880.33
Mar.	2,771.06	June	22,911.63
Apr.	12,033.43		
May	16,951.42		103,656.95*
June	16,633.08		
	<u>56,164.05*</u>		

Intake Main Canal, 1907.

July	36,162.18
Aug.	33,570.02
Sept.	18,186.19
Oct.	12,775.98
Nov.	9,740.73
Dec.	8,435.08
	<u>118,870.18*</u>
	103,656.95
	<u>222,527.13</u>
	56,164.05
	<u>278,691.18</u>

Endorsed: No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts' Exhibit K. E. H. H. (Kasten, etc.)

1784

DEF'TS' EXHIBIT M.

Expenses in Borland Litigation.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION Co, et al.

vs.

BORLAND.

1900.					
Jan.	17.	To G. L. Hoxie:			
		Dec. 10 @ 11.99, 1½ days' survey of Meanderings of Slough near Borland Plant—			
		Services of self.....	15.—		
		Expenses of trip—2 men.....	7.95		
		Services, W. L. Hills, Chairman.....	3.75		
		Dec. 12, '99, Preparing map showing slough as surveyed.....	2.50		
				29.20	
April	16.	To Houghton & Houghton:			
		Clerk's fee.....	6.—		
		Sheriff's fee.....	1.25		
				7.25	
1901.					
Jan'y	9.	To F. H. Short:			
		Dec. 3/00, Retainer in injunction suit to prevent pumping		100.—	
Apr.	2.	To Houghton & Houghton:			
		Mch. 11, Expenses R. E. Houghton to Fresno and return.....		17.30	
Dec.	31.	To F. P. McCray:			
		Dec. 28, Fare, S. F. to Fresno 5.90, cars 5¢	5.95		
		Sleeper 1.50, Porter 25¢	1.75		
		Hotel, Fresno	1.—		
		Fare Fresno to S. F. & Cars.....	5.95		

	Services, 2 days.....	20.—	34.65
1902.			
Jan'y	2. To J. W. Schmitz, Expenses, witness.....		5.10
Jan.	10. To E. S. Davis, Expenses.....		6.35
Jan.	17. To ".....		6.85
Jan.	20. To J. W. Schmitz, Expenses, witness.....		10.20
Feb.	8. To Houghton & Houghton: 1901.		
	Dec. 27. Certified copy Swamp land list #79 and Patent #55, of Visalia Land District.....	7.00	
	1902.		
Jan'y	2. Certified copy plat, Tp. 14, 15 E.	5.00	
Jan.	10. Expenses R. E. Houghton to Fresno Jan. 7 & 8 for trial.....	13.05	
Jan.	14. Certified copies Tp. Plats for Tp. 12, 14 and 13 15 E..	10.—	
Jan.	24. Keuffel & Esser Co. for blue prints.....	.35	
Jan.	29. Fresno Abst. Co. search James & Borland Assessment list.....	15.00	
Jan.	31. Expenses R. E. Houghton to Fresno Jan. 14-24 for trial	79.95	
Jan.	31. Punnett Bros. for 33 blue prints.....	4.95	
Jan.	31. N. H. Peterson, transcribing testimony.....	120.	
Feb.	28. To F. P. McCray:		255.30
	Jan. 14. Fare Mendota to Fresno.....	1.05	
	Jan. 14. Expressage 40¢, Tracing Linen 40¢.....	.80	
	Jan. 24. Hughes Hotel, Fresno 25,— phones 1.30.....	26.30	
	Jan. 24. Fare Fresno to S. F. & cars.....	5.95	
	Jan. 24. Services, 10 days.....	100.—	
	(1) Carried Forward.....		134.10

1785	Brought Forward		
M'ch	14. To D. A. Leonard, Witness, expenses		10.50
June	28. To L. Teilman, Civil Eng. 1½ days in court		15.—
June	30. To Punnett Bros. Blue Prints		1.01
Dec.	6. To Houghton & Houghton:—		
	1902.		
	Jan. 6. Phone, S. F. to Fresno .....	.25	
	Jan. 8. Phone, Fresno to S. F. 1.15, 50-75	2.40	
	Jan. 27. "	1.60	
	M'ch 12. Expressage on briefs to Short .....	.25	
	June 30. Phone to Short .....	.75	
	Aug. 1. Expressage Testimony to Fresno .....	.75	
	Aug. 5. Expressage " from " .....	.65	
	Aug. 5. Exp. R. E. Houghton to Fresno and return, Close trial	18.30	
	Aug. 15. J. W. Gearhart, Reporter ½ day	5.—	
	Aug. 15. " Transcribing proceedings	5.40	
	Aug. 15. Expressage on papers .....	.60	
	Aug. 22. Punnett Bros. for blue print of Exhibits	2.14	
	Sept. 29. Printing Plaintiff's brief Superior Court, Fresno	100.50	
	Oct. 1. Expressage on briefs to Short, Fresno .....	.25	
1903.			138.84
Jan'y	7. To F. H. Short:		
	Services preparing reply brief, &c.	250.	
	1902.		
	Feb. 1. Sheriff's Fees .....	.50	
	Feb. 3. Telephone & Telegrams	2.35	
	M'ch 19. Express ch'g's on brief .....	.50	
	July 7. Clerk's fees	2.	
	July 24. 1/3 Exp. to S. F.	6.67	
			262.02

May	6th. To Houghton & Houghton:		
	April 29. Expressage Transcript of testimony & briefs to Fresno	.75	
	Apr. 30. Expressage exhibits to Fresno	.50	
	Apr. 30. H. S. Crocker Co. printing 50 copies plaintiff's reply brief	54.90	56.15
Dec.	2d. To Houghton & Houghton:—		
	Nov. 5. Expenses R. E. Houghton to Fresno Nov. 4-5 in argument of cases	15.80	
1904.			
Jan.	9. To F. H. Short:		
	April 7/03. Services writing reply brief Superior Court, 6 days' time	300.00	
	To F. H. Short.		
	1903.		
	Mar. 24. Express charges	1.40	
	Apr. 7. Telegrams	1.40	
	Outside typewriting	14.50	
	Express charges	1.40	
	Aug. 29. Telegram	1.—	
	Oct. 8. Telegram	.40	
	Nov. 20. Transcript of testimony	4.50	24.60
Jan. 30.	To Houghton & Houghton:		
	Services including trial of case and its argument in Court 13 days and preparation of 2 briefs, in full to December 31, 1903	1,300.00	
Nov.	17. To Mastick, Van Fleet & Mastick:		
	Oct. 25. Pro-rata expenses W. B. Treadwell to Merced	2.47	
1905.			
Feb.	20. To Houghton & Houghton:		
	Services from Jan. 1, 1904, to Feb. 1, 1905	500.—	

Feb.	28.	To F. H. Short; Services for year Jan. 1, 1905.....	500.—
		Carried Forward	
1786		Page 3.	
Oct.	12.	Brought Forward	
		To Houghton & Houghton:	
		June 28. J. M. Brumlett of Assessor's office, Fresno for search as to assessments of J. G. James & Borland Estate....	10.—
		" County Clerk Fresno, Fees & Filing notice of inten- tion to move for new trial.....	2.—
		Sept. 13. H. S. Crocker, binding 4 volumes bill of exceptions on new trial & appeal.....	1.—
			13.—
1906,			
Jan.	18.	To F. H. Short:	
		Dec. 22 '04. Services during year, consultation with Mr. Houghton in re- lation to statements, &c.....	50.—
		June 8. Clerk's Fee, Notice of Intention	2.—
April	4th.	To Houghton & Houghton:	
		Jan. 13. Express charges, Bill & amendments .....	.50
		March 12. 1/2 Expenses R. E. Houghton to Fresno March 9/10 on settlement bill of exceptions	4.70
			5.20
1907.			
Feb'y	28.	To F. H. Short: Services preparation for and representation of bill of exceptions	100.00

Jan'y	To F. H. Short:			
	July 11/06, 1/3 Expenses to S. F.	13.34		
	Aug. 6/06, Express charges	.75		
				14.09
Jan'y	31. To N. C. Coldwell, services			50.—
	„ Houghton & Houghton:—			
	1907.			
Dec.	5. A. C. Hoffman, blue printing exhibits for bill of exceptions	3.06		
Dec.	6 @ 8. R. E. Houghton, expenses to Fresno, to settle bill of exceptions.	21.50		
Dec.	13. Scott McKay, Fresno, for three blue prints	1.50		
Dec.	13. Vida Scott, typewriting 2 copies patent & deeds for Recorder's office.	5.—		
Dec.	11. Binding engrossed bill of exceptions	4.50		
Dec.	20. H. S. Crocker Co, extra binding on original transcripts of testimony for the court	5.—		
Dec.	28. Express charges on bill of exceptions from County Clerk.	.50		
Dec.	28. Express charges on same to County Clerk	.50		
			41.56	
	To F. H. Short:			
	Sept. 27/07, Service and advice in connection with Borland Litigation		50.—	
	To F. H. Short:—			
	Jan'y 23/07, Express charges on papers		.40	
	Carried Forward			

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Page 4.

Brought Forward

Feb'y 3, 1908. Houghton & Houghton:—
 Services in both suits from Feb'y 1/05 to Jan'y 1/08 1,000.—
 M'ch 31. To Houghton & Houghton:—

1907.

Dec. 3. Phone to County Clerk, Fresno50
 " 2. Express charges on papers from Coldwell25
 14. Affidavit R. E. Houghton for order of Supreme Court
 extending time to file transcript on appeal50
 Clerk of Supreme Court fee filing order50

1.75

5,060.69

Cr.

274.95

Aug. 31/06. By Cal. P. & A. Co. paid pro-rata of expense

\$4,785.74

\$2,392.87

Canal Co. one-half

Turner Estate vs. Borland.

1788

1905.

M'ch 7. To A. Barion, Surveyor, on a/c services 50.—
 M'ch 9. To Chas. B. Gleaves, for 170 miles field notes 35.—
 M'ch 10. To W. Minto, on a/c expenses 50.—
 M'ch 10. To A. Barion, on a/c expenses 20.—
 M'ch 21. To W. F. & Co., Expressage on papers to Mendota25
 Apr. 4. To Phones to Fresno, Treadwell to Coldwell 1.15

Apr.	27. To W. Minto: Services as surveyor on Fresno Slough, &c., M'ch 10, April 18, 30 days at \$10.....	300.—
	R. R. fares to Firebaugh & return.....	9.80
	<hr/>	<hr/>
	Less paid on a/c M'ch 10th.....	309.80
		529.80
Apr.	30. To Firebaugh Office: Supplies to Surveyors' Camp— March meat.....	2 76
	M'ch Provisions, etc.....	96.30
	M'ch 31, 2 Cords Wood.....	10.—
	M'ch 31, 4 Horse Team & Man, 2 days.....	11.—
	April, Meat.....	4.14
	April, Provisions.....	7.80
	Apr. 17, 4 Horse team & man, 2 days.....	11.—
	Apr. 21, Surveyors' helpers: C. Buckman, March.....	5.—
	F. Adams.....	28.75
	Jos. Stevens.....	24.15
	A. W. Van Loan.....	31.—
	C. Foster.....	21.—
	M. C. McIntyre.....	21.—
	W. Kissell.....	21.—
	T. Perry.....	4.65
	C. E. Strivens.....	28.50
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		328.05
May	12. To Mastick, Van Fleet & Mastick: April 4/6, W. B. Treadwell's exp. to Fresno Slough.....	16.50
	April 17/18, W. B. Treadwell's exp. to Merced.....	10.45
	<hr/>	<hr/>
		26.95

May	20. To W. Minto:			
	May 16. R. R. fare to Merced & return.....		8.50	
	May 17. Hotel bill, Merced.....		1.50	
	May 17. Time May 16 & 17, 2 days.....		20.—	
				30.—
July	18. To A. Barion:			
	M'ch 9 and 10. Work in making Plate 2 days at \$5.....		10.—	
	M'ch 11 to Apr. 18. Work 30 days at \$10		300.—	
	Apr. 20 to 27. Work 3 days at \$10.....		30.—	
	Expense accounts 27.60, 56.85.....		84.45	
				424.45
	Less payments on account:			
	M'ch 7. Advanced by S. F. Office.....	\$50		
	Mar. 10. " " " ".....	20		
			70.—	
				354.45
Oct.	6. To Mastick, Van Fleet & Mastick—			
	May 15. Telegram to Judge Law.....		.50	
	May 16/17. Expenses of W. B. Treadwell to Merced.....		15.65	
	May 18. Telegram to County Clerk, Merced .....		.25	
	May 18. Telegram from " ".....		.25	
	May 18. Expressage .....		.70	
	May 31. A. Barion, service 2 days.....		20.—	
	" " expenses		9.25	
				46.60
	Carried Forward			

1789	Page 2. (T. V. B.)		
	Brought Forward		
Oct.	31. Mastick, Van Fleet & Mastick:		
	Preparing complaint	250.—	
	1/2 day's attendance in court on demurrer	50.—	
	3 day time on trip to Fresno Slough	150.—	
			450.—
1906.			
June	5. To J. W. Knox:		
	May 8. Copying 57 pages, 3 copies at 35¢	19.95	
	May 17. Copying Minutes 2 pages, 3 copies at 35¢	.70	
Sept.	12. To California P. & A. Co. —		20.65
	Nov. 21/05. Page, McCutcheon & Knight bill part clerk's fees.		17.62
1907.			
Feb'y	28. To F. H. Short:		
	Service on trip to Merced	50.—	
	" and advice as to settlement of all Borland litigation	100.—	
			150.—
			1,840.52
			Cr.
1906.			
Aug.	31. By Cal. P. & A. Co. paid pro-rata of expenses	120.95	
			\$1,719.57
	Canal Co., one-half		\$859.79

California Pastoral & Agricultural Co. v. Agnes Borland.

1907.			
Jan.	31.	To Page, McCutcheon & Knight:—	
		Retainer & a/c services.....	350.—
		Canal Co., one-half	\$175.—

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts F xhibit M. E. H. H., Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, by J. A. Schaertzer, Deputy Clerk.

1790 [Endorsed:] No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs The County of Stanislaus, et al. Def'ts' Exhibit N. E. H. H., Examiner. Filed May 14 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Dep'ty Clerk.

1791 In the Matter of Fixing the Maximum Rates Which The San Joaquin & Kings River Canal and Irrigation Company, a Corporation, Shall Charge for Water for Irrigating Purposes in Stanislaus County.

Regularly Heard before the Board of Supervisors of Stanislaus County, California, on May 14" and June 25", 1907.

Attorneys for Petitioner: W. B. Treadwell, Esq. and Frank H. Short, Esq.

Attorney for Stanislaus County: L. J. Maddux, Dist. Att'y.

Index.

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W. J. Stockton	25				
J. N. Stuhr	26				
J. Q. Drummond	26				
C. Z. Merritt	27-31				
J. D. Schuyler	33	35			
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Burton Smith	61	63			
E. S. Wangenheim	63				
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N. E. LEEK,

Official Reporter, Stanislaus County.

1792 In the Matter of Fixing the Maximum Rates which the San Joaquin & Kings River Canal and Irrigation Company, a Corporation, shall Charge for Water for Irrigating Purposes in Stanislaus County.

The above entitled matter came on regularly to be heard before the Board of Supervisors of Stanislaus County, State of California, on the 14" day of May, A. D. 1907:

Present:

A. E. Clarey, Chairman of the Board of Supervisors, and Supervisors J. W. Davison, M. A. Lewis, John Dunn and J. J. McMahon.

Attorneys for Petitioner, the San Joaquin and Kings River Canal and Irrigation Company: W. B. Treadwell, Esq., and Frank Short, Esq.

Attorney for Stanislaus County: L. J. Maddux, Dist. Att'y.

Mr. CLAREY (Chairman): I believe the first matter before the Board for consideration this morning is the application for fixing the water rates of the San Joaquin and Kings River Canal and Irrigation Company. We are ready to hear any of the representatives.

Mr. TREADWELL: Gentlemen, this time was appointed for the hearing of the petition of the San Joaquin and Kings River Canal and Irrigation Company for fixing its rates for irrigation in this county. The statute provides that the clerk shall fix the day for the hearing but leaves it to the discretion of the supervisors whether they shall take it up at that time or not. Publication has 1793 been made and the affidavit is on file. If you are ready to take it up, gentlemen, the Company is ready to proceed.

CHAIRMAN: You may proceed.

Mr. MADDUX: There is an understanding between us that the Company will put in its testimony to-day and then the people will have a chance to continue the matter.

Mr. TREADWELL: Yes; the district attorney of course in this matter represents not only the county, but think in a certain way particular persons or water users in this case, consequently I had a talk with the district attorney and had an understanding with him, of course if it is satisfactory to the Board, that we will produce certain of the evidence now and as to some other matters—merely formal matters that are within the knowledge of almost everybody—we may simply read the testimony taken on those matters at Merced. I have the transcript of the shorthand reporter of the testimony taken at Merced on a similar petition.

Mr. MADDUX: Yes.

Mr. TREADWELL: The statute requires the Board to ascertain what is the value—present value of the canals and other works of the company, so far that is as they are used and useful for supplying water to this county, and you are required to estimate that value and also to estimate what the reasonable annual expense—that is maintenance, repairs, superintendence, etc.—will be. You are probably all aware gentlemen that you had a hearing in this matter in 1896 and fixed rates for this company that have been in force ever since, and I only want to say with regard to those rates that this Board at that time fixed different rates for different kinds of irrigation; for example, you fixed a certain rate for alfalfa, which constituted probably 99/100 of all the irrigation—the alfalfa and grain at least and you fixed different rates for other kinds of irrigation. Since that time, on a close examination of the 1794 statute, it is my opinion and I think probably your district attorney will so advise you also on reflection, that the

statute does not justify that but requires you to fix a certain rate for irrigation, uniform, no matter what kind of irrigation it is. If one man wants to irrigate an orchard and another man wants to irrigate a field of alfalfa, under the statute as I take it, they have to pay the same price. That is all I care to say as to that matter. We suggest that the rate fixed, whatever it is, should be uniform.

Mr. Goodwin will you come forward and be sworn:

Mr. MADDUX: Judge, did you get your notice?

Mr. TREADWELL: Yes; the notice was given and published, the affidavit is on file and the Clerk has it. The statute requires it to be published for four weeks; it was published six times in a weekly paper.

R. H. GOODWIN, called and sworn as a witness on behalf of Petitioner, testified:

Mr. TREADWELL:

Q. Your name is R. H. Goodwin?

A. Yes sir.

Q. Where do you reside Mr. Goodwin?

A. Oakland.

Q. What is your business?

A. Engineer, civil and mining.

Q. How long have you been engaged in that profession?

A. Almost 33 years.

Q. In the exercise of your profession have you had anything particularly to do with hydraulic works, canals and irrigation works and similar works?

A. Yes sir, a great deal.

Q. Have you done any such work in the San Joaquin Valley?

A. I have.

1795 Q. What work of construction or planning of that kind have you been engaged in in this valley?

A. Both in Turlock and Modesto Irrigation Districts.

Q. What did you do in those districts?

A. Designed and built some portions of it—majority of it.

Q. Are you—Have you had any experience in examining the works built by others and estimating their cost?

A. Yes sir.

Mr. MADDUX: Judge, I will admit the competency of the witness, if that is what you are after.

Mr. TREADWELL: Well, that is right Mr. Maddux, of course I knew you would, but I thought these gentlemen ought to have at least an outline of it.

Q. Are you acquainted with the canals and other works of the San Joaquin and Kings River Canal and Irrigation Company.

A. I am.

Q. When did you first become acquainted with those works?

A. I think it was in 1896.

Q. Well in 1896 what did you have to do with it?

A. I was employed by Stanislaus County to examine the works of the Company.

Q. That is you were employed by the Supervisors—this Board—

A. Yes sir.

Q. For what purpose?

A. To examine the works and to put an estimate of cost on it and valuation.

A. Did you do so?

A. I did.

Q. Did you make a thorough examination at that time?

A. A very thorough examination.

Q. Were you at that time familiar with the cost of labor and materials for doing such work?

A. I was.

Q. Have you ever made any examination of those canals since?

A. I did.

Q. When was the next one?

1796 A. I forget the years, three or four years ago for the Company itself.

Q. That was in 1904; at that time you were employed by the Canal Company.

A. By the Canal Company, yes sir.

Q. Did you make a thorough examination at that time?

A. I did.

Q. And estimate?

A. I did.

Q. Have you done any since?

A. Yes.

Q. When was that?

A. Last fall.

Q. At whose request?

A. The Canal Company's request.

Q. And did you make on this last occasion a thorough examination?

A. I did.

Q. Are you familiar with the present prices for labor and materials in this Valley?

A. I am.

Q. Such labor and materials as are required in this work?

A. I am.

Q. I will ask you, did you make any written report of this work?

A. I did.

Q. I hand you now four volumes and ask you whether those are your reports? (Showing.)

A. They are.

MR. TREADWELL: These reports which I have shown the witness consist of four documents marked respectively "A", "B", "C", and "D". "A" being headed as "Estimated Cost of the Headworks and Sundry items of the San Joaquin and Kings River Canal and Irrigation Company in Fresno County" "B" being the Estimated Cost of Main Canal and Works in Fresno County; "C" being "Estimated

cost of the works of the Company in Merced County" and "D" being "Estimated cost of the works of the Company in Stanislaus County."

Q. Are those statements correct, to the best of your knowledge and ability, Mr. Goodwin?

A. They are.

Q. Do they contain all the items of cost and value in the works of the Company?

1797 A. All of those that are used and useful excepting the right of way;—the value of the land upon which the canals are built.

Q. As to those you haven't any estimate of value.

A. No.

Q. I suppose you are not familiar with the prices of real estate here?

A. No.

Q. It contains everything else, however, and correct.

A. Yes sir.

Mr. TREADWELL: These statements, gentlemen, you will find to be in detail showing each structure—that is measurements and all prices fixed and the total cost of each item and the total cost added up.

Q. In your opinion Mr. Goodwin could these works shown in these reports be now constructed at any less price than the price as you have stated it here?

A. No sir.

Q. Now as to the value of the works, do you or do you not consider these works to be worth that much now?

A. I do.

Q. Are those works in good condition and able to do their work?

A. Yes sir.

Q. And therefore, you say they are worth, in your opinion, what it would cost now to construct them.

A. Yes sir.

Mr. TREADWELL: We offer those papers in evidence and ask they be marked exhibits "A", "B", "C", and "D".

That is all Mr. Goodwin.

Mr. MADDUX: Now it is understood that we may take up the cross-examination of the witness after an examination of the reports.

Mr. TREADWELL: Yes. I will say gentlemen, that the District Attorney suggested to me that in order that this Board might familiarize itself with these things before acting, that it might be desirable after commencing this hearing now to postpone it

1798 for a month; and I will say gentlemen, I think that is a very proper thing to do. You do not want to act hastily in this, and you may want to make some examination of these canals yourselves or you may be satisfied to take Mr. Goodwin for it, but in either case, whatever you do, you want to know what you are doing, and we are entirely willing and pleased indeed that you

should postpone this without action now for another month in order that you may do what you think best.

Mr. MADDUX: Yes.

Mr. TREADWELL: We would only ask this, that the matter be determined finally sometime at least during the month of June, because the rates take effect on the first day of July; otherwise we will be pleased to aid you in anyway possible.

Mr. MADDUX: Yes; well, we will defer the cross-examination of this witness until that time, until examination.

Mr. TREADWELL: Yes, I thought you would defer until you had examined those, then you will know what you want to ask.

Mr. MADDUX: Yes.

Mr. TREADWELL: Well, that is all then for the present. Mr. Goodwin.

1799 C. A. WARREN, called and sworn as a witness on behalf of Petitioner, testified:

Mr. TREADWELL:

Q. Where do you reside Mr. Warren?

A. San Francisco.

Q. What is your business?

A. Contractor.

Q. Do you do general contracting?

A. Yes.

Q. What particular class of contracting are you mostly engaged in; what particular class of work?

A. Grading.

Q. Grading and earthwork.

A. Grading and earthwork.

Q. How long have you been engaged in that business in this country?

A. Since 1874.

Q. Are you familiar with the present prices of labor and materials—lumber and other materials used in the construction of canals, as they are now?

A. Yes sir.

Q. And the general condition of the market in the San Joaquin Valley?

A. Yes sir.

Q. Are you acquainted with the canals of the San Joaquin and Kings River Canal and Irrigation Company?

A. Yes sir.

Q. Did you ever make any special detailed examination of those canals?

A. Yes sir.

Q. When?

A. Some five or six years ago.

Q. On that occasion did you go clear through the works and examine them all?

A. Everything, yes sir.

Q. And made such an examination as to enable you to make an accurate estimate of the cost?

A. Yes sir.

Mr. TREADWELL: If you will allow me one moment, Mr. Maddux; will you pass those papers back.

Q. There has been presented to the Board here a report of the examination and estimate of the cost of this canal, that is what it would cost to construct them at present, by Mr. Goodwin, and I would like to see how his prices correspond with what you know:

For example, Mr. Goodwin here, in that kind of lumber 1800 which is used in the dam, headgates, bridges and gates throughout this canal, has taken his prices at \$27.00 per thousand; you are familiar with the kinds of lumber. He has put that price on both red wood and on Oregon pine, with the exception of certain special articles—weir boards, piles and battens, which is estimated at a different price. Now he figures lumber in general at \$27.00 per thousand, how does that compare with what you know to be the prices at the present time for that character of lumber?

A. That is the price of lumber at present.

Q. Can lumber be obtained any cheaper than that at San Francisco?

A. Not at the present time.

Q. That of course is the price without freight to here.

A. Yes sir.

Q. That is the San Francisco price.

A. The San Francisco price.

Q. Now such lumber as is used for weir boards he has put at \$50.00 per thousand; how is that price?

A. That is as cheap as you can get it.

Q. And battens at \$30.00 per thousand.

A. Yes sir.

Q. Now carpenter-work, such carpenter-work as was used on the rough lumber used in building this dam and the gates and bridges, in this he has put at—according to the kind of work—from \$7.00 to \$10.00 per thousand. How does that correspond with the actual prices?

A. Well, that is away below anything that any contractor would bid.

Q. You would not be willing to take a contract at those prices would you?

A. No.

Q. Could it be done at those prices now at all.

A. No, it could not be done at those prices at all.

Q. Now earthwork, the kind of work done in the construction of the principal canals of this Company, the usual excavation in building large canals, he has estimated at ten cents per cubic 1801 yard; could that work be done by anyone in the San Joaquin Valley for as low a price as that?

A. No; I don't know of any way that it could be done for that.

Q. And excavation for canal by constructing works by excavating

with a dredger he has put at five cents per cubic yard; could it be done for such a low price as that?

A. I don't think so.

Mr. TREADWELL: That is all.

Cross-examination.

Mr. MADDUX:

Q. Did you ever do any work over in that section of country where this canal is?

A. I never did any work exactly in that section. I have been working on the West Side.

Q. What part of the West Side?

A. At Coalinga.

Q. At Coalinga.

A. Yes sir.

Q. What kind of work was it?

A. Ditching, just the same as——

Q. To what extent?

A. It wasn't as extensive—it wasn't of as great an extent as this.

Q. What is the width and length of the ditch?

A. Our main canal there was about thirty feet on the bottom—twenty-five feet on the bottom.

Q. Yes; well that was in the mountains, wasn't it?

A. No sir, that is not in the mountains.

Q. From what source did you take the water?

A. Out of a creek there and some wells and springs.

Q. And what was the length of the canal?

A. The length wasn't over four or five miles; it was short.

Q. And that is all of your experience on the West Side?

A. That is the most of my experience on the West Side.

Q. Have you made a minute examination of this canal?

1802 A. Did I make a minute examination.

Q. Yes.

A. Yes sir.

Q. Now these values that you put on this lumber and material there is the valuation now, isn't it, at the present time?

A. Certainly.

Q. Well it is of a very exaggerated value now, isn't it?

A. I don't know; if you go to buy it it is not exaggerated.

Q. Well, I say—I don't mean that you have exaggerated it, but I say the price of lumber is exaggerated on account of——

A. The price of lumber is high.

Q. Yes, very high.

A. Yes sir.

Q. Much higher than it was two years ago.

A. Higher than it was eighteen months ago, yes sir.

Q. Yes; now did you put any value on this lumber as it is in place there, being used for a number of years, how much it is worth now? Make any valuation on that at all?

A. No.

Q. The only valuation you have made is of new lumber, what new lumber would cost to re-construct.

A. Yes sir.

Q. You have no idea what the value of this lumber was in 1906-1896, have you?

A. Do I know the value of it at that time?

Q. Yes, 1896.

A. Certainly I do.

Q. How much higher now is the value than in 1896?

A. The price of bare lumber probably ten or twelve dollars a thousand.

Q. About what per cent would you figure to allow for the increase in price since 1896?

A. The difference between the price of that lumber in 1896 and now is a big difference; there has been a big advance.

Q. Well, about fifty per cent?

Mr. TREADWELL: I think we can agree the market price 1803 all 'round must be over fifty per cent higher now than it was in 1896.

Mr. MADDUX: Yes.

Q. Now do you know when this canal was constructed, these works were constructed, especially in Stanislaus County?—I think it was in '72?

Mr. TREADWELL: I forget the year; there have been two periods of construction in Stanislaus County. One in 1873 or '4—commenced in 1873, and one in 1875 or between that and 1880.

Q. You have no idea of the value of construction at those periods have you?

A. No, that is before my time.

Q. That was before your time.

A. Yes.

Q. Now how does the value of the lumber at the present time, that is, being in its used state—having been used for a number of years in the canal—compare with the value of new material? Take the material as it is there now, having been in use for a number of years, how does it compare with new material that would be required to reconstruct?

A. Well I could not make an accurate estimate on that.

Q. You can't put any value?

A. I haven't given it any thought.

Q. You cannot put any value—Have you places any value on the material as it now stands, as it is now placed in the canal?

A. The only way I could place a value on the material as it now stands; I considered what it would cost new to put it there.

Q. I know; but you don't figure the old lumber as valuable as new?

A. Well, no.

Mr. SHORT: I suppose you will figure what we ought to be allowed each year for depreciation!

Mr. MADDUX: Why, certainly; you are proving the value of your works.

1804 Mr. SHORT: Yes, I know.

Mr. MADDUX: But you want to prove them as—according to the prices of lumber now which is fifty per cent higher than when constructed.

Mr. SHORT: I was just looking at the other horn of that dilemma you spoke about.

Q. Yes; you have no idea what the value of the material of that canal is now as it stands?

A. No, I have no idea.

Q. You did not place any value on that.

A. I did not place any value on it; I didn't look at it for that purpose.

Q. You didn't look at it for that purpose and you made no estimate of it.

A. No.

Q. Now did you make any estimate of the excavation, the price of excavating all that material that is in that canal?

A. Yes.

Q. What did you find that to be?

A. Well, to do it now?

A. Yes.

A. I would not take a contract to do it to-day for fifteen cents per yard; and you can't find any responsible contractor in the State of California that would.

Q. Yes; well do you know what the value of that was in 1896?

A. Well I know that they were doing work around here in 1896 for eight and ten cents a yard.

Q. Yes.

A. And I know I bid on lots of work here and always got left.

Q. Yes; at that time.

A. At that time.

Mr. MADDUX: Yes; I believe that is all.

Mr. TREADWELL: That is all Mr. Warren.

Mr. TREADWELL: Now gentlemen, with your consent, and the District Attorney has already informed me that he will consent, I would like to read from the transcript of the testimony taken in Merced the testimony of some other witnesses who testified at that time. Is there any objection?

Mr. MADDUX: Well this goes to the value of the land taken?

Mr. TREADWELL: Yes, it is almost entirely to the value of the land in these three counties—the land occupied by the canals and their rights-of-way, and some purely formal matters of that kind.

Mr. MADDUX: Well, just consider that read, Judge.

Mr. TREADWELL: I will say, in order that the reporter may note—I will leave this with him—it is the testimony of J. Q. Drummond, F. B. Marks, W. J. Stockton, J. N. Stuhr, all of whom are farmers in either Merced, Fresno or Stanislaus County, and who testified solely as to the present values of the land occupied by the canal; and the testimony of Mr. Drummond also as to the con-

dition of the labor market in this Valley at the present time, his testimony being in brief that it is impossible now to obtain sufficient labor at any price to do the necessary farming work; for example, getting in the hay; and in his opinion there could not be sufficient labor obtained at present in this Valley by any means he knows of, and he is a very experienced man, to build this canal at present at all. There is also the testimony of Mr. C. Z. Merritt, the secretary of the company, as to certain formal matters principally which are embodied in two statements which are marked in here exhibits E and F. One of those is a statement from the books of the Company showing the number of acres of land irrigated in each year by showing how much was irrigated from each different canal and how much in each county. With regard to that we will say, gentlemen, because you are perhaps not familiar with that, that this Company has three systems of canals, one of these systems—the main canal—commences in Fresno County and runs into Stanislaus

County and furnishes water here; but there are two other
1806 canals, one called the Dos Palos system and the other one the outside canal, both of which terminate in Merced County and do not irrigate any land in this county and therefore of course the value of those systems is not to be considered in fixing rates in this county. Therefore this statement of irrigation shows just how much land was irrigated in each year from the main canal in Fresno county, how much from the main canal in Merced county and how much from the main canal in Stanislaus county; then similarly according to counties, the amount irrigated by the Dos Palos and the Outside systems.

I offer this statement, and also a statement showing the actual cost of—the annual cost of maintenance expenses.

Mr. MADDUX: How is this made up? Who makes these statements?

Mr. TREADWELL: Mr. Merritt who is the secretary of the Company, from the books of the Company. The other statement I have here is the annual expenses of the Company in maintaining these works, in furnishing water and in keeping them in repair. Now this statement shows each item in each year, and I will say there are two columns of figures here, one in violet ink and one in red ink; the one in violet shows the various items as they appear on the books, and footed up, which the law requires you to estimate. And in making that estimate there is one item in a number of these years which I am of the opinion and I think the District Attorney will agree with me, is not proper to be considered in fixing the rates. The result of the fixing of rates by this Board in 1896 wasn't satisfactory to the Company and very considerable litigation, as you painfully know and as we painfully know has continued through many years since and has cost a great deal of money. I do not think it is right or proper that that should be charged in any way against the water consumers. I think we ought to pay

1807 our own litigation costs, therefore we have made another column here in red ink showing the proper cost of main-

tenance omitting that item, which is a very large one; and this statement we also offer.

Mr. MADDUX: Well with this understanding Mr. Treadwell, that in case we require Mr. Merritt here—

Mr. TREADWELL: Certainly, I told you that; and when you inform me will produce the books here or anything of that kind.

Mr. MADDUX: Yes.

Mr. TREADWELL: I will say with reference to the books of the Company, however,—I presume it would be satisfactory to the Board and I think it will be satisfactory to you—if you desire to examine the books I would like you at our expense to come and do so at San Francisco because our books were burned by the fire—the great fire there, some of them were entirely destroyed, but the books from which this statement was made—which contained this—were not entirely destroyed but they were charred and can only be read with great care because the least handling would destroy them and I would not like to have to carry them to Modesto; but if you will come there at any time you are welcome to them and we will bear the expense of the examination.

Mr. MADDUX: All right; that is all right.

Mr. TREADWELL: Mr. Reporter there is a transcript of the testimony taken in Merced I have offered, I will leave it with you.

Now gentlemen, I will pass to the District Attorney for examination a form of order which I have drawn here after much thought and which I think complies with the statute, and it is quite important that whatever order you should make should be made in accordance with the statute. Of course I have left blanks in here for the figures you will finally determine on, as to those I make no suggestions at all, but the form of the order is one I would like to see entered and I think the District Attorney will approve of it.

Mr. MADDUX: Well, that will be after examination.

Mr. TREADWELL: That is after you examine it (handing to Mr. Maddux a copy).

Now Gentlemen, if you would like to postpone this hearing to another time we will be prepared to attend at that time and with any witnesses that you may designate.

Mr. MADDUX: What is the next day of meeting?

CHAIRMAN: I would suggest we postpone it to the 11th of June.

Mr. MADDUX: What is the next day of meeting?

CHAIRMAN: We meet on the 10th of June.

Mr. MADDUX: I think you had better have a day specially for this matter.

CHAIRMAN: A special meeting?

Mr. MADDUX: No, a special day; finish all your other work and then take this up. The 12th would be Wednesday.

CHAIRMAN: Say we put it for the 12th of June and take it up at ten in the morning say, would that give plenty of time?

Mr. MADDUX: Yes.

Mr. SHORT: We might not finish it in a day, why not put it on

the 11? I have a matter that we have agreed to set on the 13", so if it would be satisfactory all 'round why not put it on the 11?

MR. MADDUX: Mr. Wangenheim cannot be here on the 11"; he represents those people.

SUPERVISOR DAVISON: If we don't get through the first day we can continue the following day.

MR. SHORT: Yes, but I say I have a matter on the 13" and I wanted to be here with Mr. Treadwell if I could.

SUPERVISOR: We might take it up on the 12"—we might continue it to that day and then if not concluded it could be continued over the 13".

CHAIRMAN: Well, as Mr. Wangenheim cannot be here on—

1809 MR. TREADWELL: There is one matter I forgot to mention; there is in this transcript of testimony that was taken at Merced the testimony of two witnesses on another point and if there is no objection I would like to introduce this also; the testimony of J. D. Schuyler and Walter James who are engineers very familiar with conditions in this Valley and testified as to the various amounts of loss of water in these canals by evaporation and seepage. As those witnesses reside, one in Los Angeles and the other in Bakersfield it is difficult to get them.

MR. MADDUX: What do they fix it at?

MR. TREADWELL: Well the sum of their testimony is this, that in the first portion of the canal from the beginning—beginning with the head and down to the central point of Merced county the loss on a full canal is ten feet, that is ten second feet per mile, from there to the middle point in Stanislaus County seven feet per mile, and from there to the end of the canal five feet per mile.

MR. MADDUX: What percentage? Here in the other case they testified it was from 25 to 30 per cent.

MR. TREADWELL: Well in that other case the testimony was by different witnesses. These witnesses made a special examination of the canal and give actual quantities.

MR. MADDUX: That is all right; we don't care for that.

MR. TREADWELL: Very well, then I offer that also.

MR. MADDUX: I can't hardly understand so many feet; what percentage?

MR. TREADWELL: Well, it is about like this—

MR. MADDUX: What percentage would that be?

MR. TREADWELL: I will tell you what percentage that would be. I have figured that myself—I haven't those figures here.

MR. SHORT: Yes, I have them.

1810 MR. TREADWELL: Well if you have that computation of mine I can tell Mr. Maddux. Now reducing that to percentage, it would be about like this, the loss for the water delivered in Merced county—in Fresno county would be .1243—that is to say about one and one-fourth per cent—no, about twelve per cent; in Merced, for water delivered in Merced county .339, that would be about 34 per cent; for water delivered in Stanislaus County .5367 or about 54 per cent.

Mr. MADDUX: It would be more than half then in this county.

Mr. TREADWELL: Yes; however actual experience has shown as you will see by the testimony in that transcript of Mr. Rouse—

Mr. MADDUX: Yes.

Mr. TREADWELL: Mr. Rouse has since testified—the same thing in another suit—that in actual experience by the greatest care he could take he never could get half the water down to Stanislaus county even when he shut it off entirely from the other counties above. However that is a matter to be considered hereafter. Thank you.

The further hearing of the matter was continued, by consent of all parties, to June 12th 1907 at 10 A. M.

1811 “J. Q. DRUMMOND, a witness called on the part of the San Joaquin & Kings River Canal and Irrigation Company, after being duly sworn, testified as follows:

Mr. TREADWELL:

Q. Where do you live, Mr. Drummond?

A. I live in Merced county.

Q. Are you acquainted with the canals of the San Joaquin & Kings River Canal and Irrigation Company?

A. Yes sir.

Q. You irrigate lands from one of these canals do you not?

A. Yes sir.

Q. Were you ever employed by that Company in any capacity?

A. Yes sir, I was.

Q. How long ago was that?

A. I was first employed in 1871.

Q. And when did you leave?

A. Well, about 18 years, I think.

Q. You worked for them about eighteen years?

A. Yes sir. I think during that time I was off six months out of a year I went away.

Q. So you haven't worked for that Company since 1889?

A. No sir.

Q. During the period since that time you have been engaged in farming, have you not?

A. Yes sir.

Q. And also been engaged for some years as deputy assessor?

A. Yes sir.

Q. And in those ways you have acquired, I believe, a knowledge of the value of land along the line of that canal.

A. Yes sir, I think I have.

Q. What, in your opinion, is the value of the land occupied by that canal in Fresno County, that is, the land right along over the line of the canal and right of way, how much is that worth an acre on the average in Fresno County, that is the present value?

A. Some parts of it is worth more than others.

Q. I mean strike an average.

A. Well I would say 15 to 20 dollars an acre.

Q. You are speaking now of the main canal are you?

A. Yes sir, that is the main canal.

1812 Q. Are you acquainted with the Dos Palos canal, the land along there?

A. No sir.

Q. You say the value along the main canal in Fresno County the land is worth from 15 to 20 dollars an acre.

A. Yes sir.

Q. Along the main canal in Merced County taking an average through the whole county how much would it be on an average?

A. Well, there is a great difference in the quality of the land.

Q. Of course, we understand that.

A. There is some of the worst land through which the canal is constructed is in Merced County, and there is probably 10 miles there in one body that I would think that is not worth more than \$10 an acre.

Q. But taking an average of the whole land on the canal, line of the canal through Merced County, how much do you think it would be on an average?

A. Have you a map with the mileage marked on it?

Q. No, sir, I have no map here at present. I had all these things here, they were filed in 1904 but on searching lately—I don't know what has become of those things.

A. I have an idea that I would rather have you segregate it and place the value on the different sections.

Q. Well, we will say, take it from where it enters Merced County down to Camp 13, how much would the land be worth along there?

A. \$10 an acre.

Q. Now, from there on down to Volta?

A. You won't go through cheap lands there.

Q. Well, say about as far as you think the cheap lands do go.

A. If I had a map with the mileage on I could point it out exactly. Well, I should say that from Camp 13 for 6 miles the land is about of the same value that I gave on the other parcels; from that down to the vicinity of Volta I would say it was worth a hundred dollars an acre.

Q. And from Volta down to Newman?

A. From Volta down to Newman, down near San Louis
1813 Creek, say \$40.00 an acre; from San Louis Creek on down to the county line \$100 an acre; that would be my estimate.

Q. Well, take all those together wouldn't you say Mr. Drummond that \$50.00 an acre for the average of the whole thing would not be far out of the way?

A. No, I think not.

Mr. TREADWELL: That is all, unless someone else wishes to ask something."

"F. B. MARKS, a witness called on the part of the San Joaquin & Kings River Canal and Irrigation Company after being duly sworn testified as follows:

Mr. TREADWELL:

Q. Where do you live Mr. Marks?

A. Merced County.

Q. At what place?

A. It is near Dos Palos, on the colony.

Q. Are you familiar with the canal of the San Joaquin and Kings River Canal and Irrigation Company known as the Dos Palos canal?

A. Yes sir, the canal that supplies Dos Palos?

Q. Yes, the canal that supplies Dos Palos?

A. Yes sir.

Q. You have been irrigating under that for a number of years, have you not?

A. Yes sir, for a number of years, 13 or 14 years.

Q. You are a farmer?

A. Yes sir.

Q. And as such have been acquainted with the lands in that vicinity?

A. Yes sir, I think so.

Q. What, in your opinion, is the value of the land occupied by the Dos Palos Colony Canal, the land actually occupied by that canal and the right of way adjacent; how much is it worth on an average?

A. Well, that runs through different streaks of country; the head of that canal begins in very poor land, the rest of it after a distance of 6 or 8 miles is very good land.

Q. Well, just give an average if you can.

A. I should say the first land isn't worth over \$25.00 or
1814 \$30.00 an acre but it runs through land that is easily worth
\$100 an acre.

Q. And could you put an average price on it along for good and bad both?

A. Well, that would depend on the mileage, on how many miles it would run through what I call poor land and how much of the good; there is a good deal more good land than poor. I should say it would be worth on an average \$60 or \$70 an acre.

Q. Are you also familiar with the land through which the main canal runs through Fresno County?

A. Yes sir.

Q. How much on an average do you think it is worth?

A. Well, most of that, that is poor land. There is a little good land down near the head of the canal but the greater part of that is very poor land. I shouldn't think that it would average over \$15.00 an acre.

Q. The good land you speak of at the head of the canal is only just a little, short strip?

A. Yes sir, just a little, short strip.

Q. And nearly all of it is very poor land?

A. Yes sir, almost exclusively.

Q. How far are you acquainted with the land occupied by the outside canal in Fresno county?

A. Well, through Fresno County and just a portion of Merced; I am not acquainted below.

Q. Through the portion you are acquainted, how much is that land worth?

A. Well, that land produces better crops than some of the other land, at the same time there is very little demand for it; I should say 15 to \$20 an acre is the outside figure on that.

Mr. TREADWELL: That is all."

1815 "W. J. STOCKTON, a witness called on the part of the San Joaquin & Kings River Canal and Irrigation Company, after being duly sworn, testified as follows:

Mr. TREADWELL:

Q. Where do you live, Mr. Stockton?

A. I live near Los Banos.

Q. What is your business?

A. Well, at this time I am a farmer.

Q. How long have you been farming in this county?

A. Ever since 1872.

Q. You are quite well acquainted with the value of lands in the vicinity that you live, are you not?

A. I think so.

Q. Are you acquainted with the value of lands generally through which the canals of this company run?

A. I think so, yes sir.

Q. How much in your opinion, is the average value of lands occupied by these canals in Fresno County, just the average.

A. Well I am not acquainted with the Dos Palos canal.

Q. You are acquainted with the Main canal and the Outside canal?

A. I should think \$15 an acre would be very fair.

Q. How much in Merced County?

A. I would have to say like Mr. Drummond, I think from the county line up to San Louis Creek would average \$100 an acre, about 7 or 8 miles from where Mr. Wood's land and the Canal Farm there, there is about 10 miles of land worth \$100 an acre, the balance of the land, of course, is not very good, it is all alkali, say \$10 or \$12 an acre.

Q. Are you acquainted with the value of the land below that down across the line of Stanislaus County?

A. Of course I know the land, but I am not well acquainted with the value but I should think about the same value as the land in Merced County out through Cottonwood and through there.

Mr. TREADWELL: That is all."

1816 "J. N. STUHR, a witness called on the part of the San Joaquin & Kings River Canal and Irrigation Company, after being duly sworn, testified as follows:

Mr. TREADWELL:

Q. What are your initials?

A. J. N.

Q. Where do you live?

A. Newman.

Q. Stanislaus County.

A. Yes sir.

Q. What is your business?

A. Real estate and Insurance business.

Q. Are you familiar with the value of lands in the vicinity of the canal of this company in Stanislaus County?

A. Yes sir.

Q. On the average over where this canal crosses the county line from there to the end of the canal how much on the average do you think the land is worth which this canal occupies??

A. I think it will estimate about on an average of \$100 an acre.

Q. And are you at all acquainted with the value of land above that in Merced County along the canal?

A. Yes sir.

Q. How far up?

A. Well, up to Volta.

Q. Well, from Volta then down to Newman, between those places or to the county line, how much do you think the land occupied by the canal in Merced County is worth?

A. From the line to San Louis Creek the average would be about pretty near the same as in Stanislaus County; from there up it is a good deal cheaper.

Mr. TREADWELL: That is all."

J. Q. DRUMMOND, recalled on the part of the San Joaquin & Kings River Canal and Irrigation Company, after being duly sworn, testified as follows:

Mr. TREADWELL:

Q. Mr. Drummond what do you know of the conditions of the labor market in this vicinity at the present time as a farmer, is labor plenty, do you find it plenty or scarce?

1817 A. No sir, it is very scarce.

Q. When you can get men—I mean ordinary labor—I mean when you can get men, how much do you have to pay them?

A. I am paying \$2 a day now for farm hands.

Q. Can you get enough men even at that price?

A. No sir.

Q. You built a large portion of this canal did you not?

A. Yes, of the old canal.

Q. And you are familiar with that kind of work.

A. Yes sir.

Q. Would it be possible at the present time in the condition of labor in this valley to get anyone to undertake to build this canal now, just now, could you get labor enough to do it?

A. I don't think anyone would undertake it right now.

Q. Would it be possible to get enough teams to do the work?

A. I don't think so.

Q. How do the prices for teams now compare to what they were a few years ago?

A. Very much higher.

Mr. TREADWELL: That is all."

"C. Z. MERRITT, a witness called on the part of the San Joaquin & Kings River Canal and Irrigation Company, after being duly sworn, testified as follows:

Mr. TREADWELL:

Q. Where do you live, Mr. Merritt?

A. In Oakland.

Q. Are you connected in any way with the San Joaquin & Kings River Canal and Irrigation Company, incorporated?

A. I am the secretary.

Q. How long have you been secretary?

A. I have been secretary of that company ever since its incorporation.

Q. And of its predecessor altogether?

A. Altogether, since '83.

Q. You have had the custody of the books and accounts of the company during the time you have been secretary have you not?

1818 A. Yes sir.

Q. Are those books now all in existence?

A. No sir.

Q. What happened to them?

A. Several books were burned in the fire of April of last year.

Q. During the time that those books were in existence did they show the actual cost of the canal and works of this company?

A. They didn't show the actual cost so as to be able to segregate the entire cost in items that could be identified as such. The cost was all shown with that item of original costs of construction; there were mingled during a certain period charges or costs of operation on one section of canal first constructed was carried on at the same time that construction was being carried on in later work.

Q. So, if I understand you, some of the charges in that book that were charged to construction perhaps should not have been charged to construction?

A. Yes sir.

Q. Did you ever consult these books or make an examination of them to ascertain how much the canal cost?

A. I did.

Q. What was the result of that examination? What did you find?

A. Identifying what items that could be possibly identified as being the cost of the construction entirely eliminating not only those that were relating to maintenance but those we could not identify and which we knew must have related to construction but could not be identified as such, amounted to \$1,019,763 on the first of July, 1904.

Q. So up to that time you knew the canal had actually cost in money that much, if not considerable more.

A. Considerable more.

Q. But that much was definitely shown?

A. That much was definitely shown as the construction cost.

Q. Do these books you have, does it give the value of the land occupied by the canal?

A. No sir.

Q. Does it include the value of the land?

A. No sir.

Q. It doesn't include the value of the land?

A. No sir.

Q. It just includes the actual cost of the works?

A. Yes sir.

1819 Q. With regard to the land that the canal runs through, the rights of way, speaking generally now, have you got?

A. The rights of way from the head works of the terminus of the main canal in Stanislaus county, about 200, for the most part 200 feet; there is a section of that, however, which is for 250 feet where a parallel canal has been constructed running from a point in Fresno County to Los Banos Creek in Merced County.

Q. Now, the parallel canal is located in part on the right of way of the main canal?

A. Yes sir.

Q. Then it is 50 feet in addition.

A. For 50 feet for the purpose of maintenance to give us room to operate.

Q. Now, such lands as you have and other joining your canal, of course I wouldn't ask you about the title, this may be shown by deeds &c., but what do you know about it, do you know anything about it yourself?

A. We know it for the most part but I don't profess to speak as an expert on title.

Q. But you suppose you know?

A. We have a record title.

Q. And in any event that land which is occupied by and along side of the canals you have the exclusive use of that, have you not?

A. Yes sir.

Q. And in the exclusive use?

A. Yes sir.

Q. You couldn't manage the canals without having it?

A. No sir.

Q. There are three canals connecting the outside canal with the main canal known as outlets 1, 2 and 3, do you know the right of way for these?

A. Yes sir.

Q. What is the size or width of them?

A. I believe 50 feet.

Q. There is a little branch canal in Stanislaus County called Orestimba Branch, what land have you there besides what lands the canal itself occupies?

A. None in that particular branch.

Q. On that particular branch the only land you occupy is what the canal itself holds?

A. Yes sir.

1820 Q. That, I believe, according to the size given would be 40 feet?

A. Yes sir.

Supervisor HALEY:

Q. By the way, does the value of the land or the right of way, is it included in this here estimate you made?

MR. MERRITT:

A. No sir.

Q. Can you give an approximate value of the amount of land through which the canal runs?

A. I never made any estimate of the value personally.

Q. You add that to the Company's property, don't you?

A. No sir, we never have it in the books, it doesn't appear in the books.

Q. You value that land at considerable money?

A. We value it, yes, we didn't pay for it, that is, for a great deal of it was given to us for a right of way for the benefit which accrued to the land owners by virtue of this construction; our books only show the cost, our books don't show the estimated value of things that didn't cost us anything.

MR. TREADWELL:

Q. So, a considerable portion of the land occupied by these canals and right of way were in a fashion donated by the owners in order that the company should build the canal which would benefit their lands?

A. Yes sir.

MR. TREADWELL: That's all the testimony that we care to put in, but if there is anything, however, that the board desires, we would like to enlighten it.

Supervisor BAXTER: What were the rates here before?

Supervisor HALEY: As I understand the matter the company considers the former rates too low and their desire is to place the matter before the board in such a way as to give an estimate as to what they really ought to have on the interest or money that is invested in this here estimated cost of the canal.

MR. TREADWELL: The law generally requires you to fix the rates based on this value, you are required to determine what the
1821 value is and you are required to fix the rates of not less than 6 per cent on that and in addition to that how much it cost—I have forgotten to prove that—how much it cost to keep up the canal each year."

"C. Z. MERRITT, recalled on the part of the San Joaquin and Kings River Canal and Irrigation Company, after being duly sworn, testified as follows:

Mr. TREADWELL:

Q. Have you had prepared from your books a statement of the annual expenses of this company?

A. I have.

Q. During what period?

A. Beginning with 1895 and continuing to and including 1906, being a period of 12 years.

Q. Have you that statement in writing?

A. I have.

Q. That statement shows correctly what it has cost the company to keep this canal in repair and the administration and services necessary to furnish the water?

A. Yes, with one qualification which I would like to state in the year 1890.

Q. 1890?

A. No sir, 1900. The items which are given to make up the maintenance account as to that part of the statement containing three items which I was unable to accurately decipher from the books which were destroyed by fire I identified as correct one of the accounts I thought I was able to read and put it down what I made it out to be, the other two I couldn't make out at all, therefore I put the total that way that was necessary to make up a grand total. These two items put them in as one item. I want to make that qualification, and so if I am able to decipher it I can make the change.

Q. This statement shows each item of expense, one of these items that appears here is expenses of certain litigation with Stanislaus County through water rights and I see your statement also contains the tabulation omitting that item?

A. Yes sir.

1822 Mr. TREADWELL: And I say to you that I don't think we should have any credit for that item while the statute says we ought to be allowed our reasonable expenses. Of course we have to defend our water rights and we are entitled to that but still I don't think we are entitled to litigation we have over water rights so in this statement we have eliminated the expenses of that litigation.

Q. Have you prepared, Mr. Merritt, have you the number of acres irrigated from each canal and in each of these three counties?

A. I have.

Q. From what period?

A. Beginning with 1897 and continuing to and including 1906, a period of ten years.

Mr. TREADWELL: Please note the statement, just put that in and make that exhibit E, this statement and now this one, the statement of the number of acres, Exhibit F.

Mr. TREADWELL: This statement, gentlemen, shows the number

of acres irrigated in each year from each of these canals separated by canals, and separated by counties, this statement here.

Mr. TREADWELL: Now here before this board on the 20th day of June 1904, there were two witnesses who testified, J. D. Schuyler and Walter James. I will ask the consent of your Honors to introduce this testimony which was taken down by the shorthand reporter, and we will ask it to be copied from this transcript. You all remember no doubt what their testimony was and the shorthand reporter can copy it."

1823 "J. D. SCHUYLER, a witness called on the part of the Petitioners, after being duly sworn, testified as follows:

Mr. FARRAR:

Q. Mr. Schuyler, where do you reside?

A. I live in Los Angeles.

Q. How long have you lived in Los Angeles?

A. About 12 years.

Q. What is your business or profession?

A. I am a civil engineer.

Q. How long have you followed that business?

A. About 35 years.

Q. Have you had any experience in building or engineering for water companies, canals?

A. Yes sir, very extensive experience.

Q. Do you know anything at all about what the proportionate loss of water by reason of evaporation would be in a canal in the San Joaquin Valley west of the San Joaquin river?

Mr. TREADWELL: I suppose you mean evaporation and seepage also?

Mr. FARRAR: Yes, evaporation and seepage, what proportion according to the length of the canal?

A. I made some endeavors to ascertain the loss in canals in a number of instances in this state for a good many years back. My first experiment was in 1880 in connection with the canals in Kern county, and I was then employed as Assistant State Engineer endeavoring to get at the facts in connection with the water question and irrigation question throughout this valley and measured all the canals repeatedly and for months with a view of determining what the losses were by evaporation and seepage. I also measured the San Joaquin & Kings River canal, but not so completely, at that time for the same purpose. My general conclusion was published in a report in 1880. My recollection of those conclusions is in a general way what the losses by evaporation and seepage ranged from about one cubic foot per second per mile to about ten, that being the maximum of the largest and widest canal in the state.

1824 I have recently gone over this canal, driven the whole length of it and observed the condition of it and compared it in my mind with the conditions as they prevailed in Kern County at the time of my determination there, and while an examination of that sort is not a conclusive one as to facts, yet in a general way I think that one would be conservative in saying that the losses are greater

in this canal at the present time than in the Kern county canals; there is more positive evidence of it on the surface.

Q. What is the occasion for that?

A. You see for miles standing pools, great areas of seepage in which quite a growth is taking away the water at a very rapid rate by evaporation, and I made up some general figures which, I think, are fairly conservative.

Q. Have you got those figures?

A. Yes sir. From the head of the canal to the central point of the Fresno county section, which is 11 miles, I concluded that the average rate of loss was about 10 cubic feet per second per mile, starting with the full canal of about 1000 cubic feet per second, which is the capacity of the canal.

Q. What percentage would that loss be?

A. That would give a total loss of 110 second feet, or cubic feet per second.

Mr. TREADWELL: That is, do I understand, 110 out of 1000?

A. 110 out of 1000. Now from the central point of Fresno county to the central point of Merced county along the canal, a distance of about 19 miles, I think the rate is practically the same. In that distance we have a double canal, and the total width of the two is something over 100 feet. The loss there in that section in 19 miles would therefore be about 190 cubic feet per second, making 300 in the first 30 miles. That would be 30 per cent of the entire volume starting, a thousand second feet.

Mr. FARRAR: From the head to the central point in Merced county?

1825 A. From the head to the central point in Merced county. From the central point in Merced county to the central point of the canal in Stanislaus county, a distance of about 25 miles, the canal is narrower and not so deep and the average loss I think is not greater than seven cubic feet per second per mile. Seven times twenty-five would give a total loss of 175 feet in that section.

Q. That is, out of 1000 feet.

A. Out of a thousand feet, making 175 down to that point out of a thousand. Now from the central point of Stanislaus county to the lower end of the county, a distance of about six miles, the loss is less per mile, because of lessened width and depth and difference in soil and I have estimated it at an average of five cubic feet per second per mile, making a total loss of 30 in that section. The entire loss would amount to 505 cubic feet per second out of one thousand.

Q. That would be a little more than half?

A. A little more than half.

Q. That is to say, now, if you turn in two feet of water at the head of that canal, the proportion would be a loss of about one half of that amount that you turned in at the head.

A. Well if you turned in so small quantity, you would not get anything down at the lower end.

Q. You have calculated in turning in one thousand feet?

A. Turning in a thousand feet. Well, if you turned in a lesser amount, we will say about 600, you would have less total loss but

a higher percentage of loss. You would perhaps get 150 feet through the whole length of the canal if everything was closed, all the gates were shut as tight as possible, and would lose 450 feet. That would be just 75 per cent of the starting quantity.

Mr. FARRAR: I think that is all.

Cross-examination.

By Mr. TREADWELL:

Q. Let us understand, Mr. Schuyler, what you mean now 1826 by the central point at which you estimate this loss?

A. Why the point mid-way of the canal in the county.

Q. In lineal mil-age?

A. In lineal mileage along the canal between the point where it enters the county and where it leaves it.

Q. I did not catch the capacity of the lower end of this canal in Stanislaus county. About what is it?

A. I think it is about 300.

Q. 300 feet?

A. Yes sir.

Q. Well, now, suppose that you were to turn in at the head of this canal 300 feet, how much of that, in your opinion, would ever reach Stanislaus county?

A. Well, I don't think you would get much or any of it at the lower end. I think it takes more than 300 feet to go through, that is from the general appearance of things. That matter can be more definitely determined by exact measurement, and that is the proper way of ascertaining it.

A. I understand the special examination which you say you made of this canal you made recently?

A. Yes sir, I was over it last week.

Q. But you have been acquainted with it for many years.

A. I have been acquainted with it for 35 years.

Mr. TREADWELL: That is all."

"WALTER JAMES, a witness called on the part of the Petitioners after being duly sworn, testified as follows:

Mr. FARRAR:

Q. Your name is Walter James?

A. Yes sir.

Q. Where do you reside Mr. James?

A. In Bakersfield.

Q. How long have you resided there?

A. Well, over 30 years.

Q. What is your occupation?

A. I am a civil engineer.

1827 Q. How long have you been engaged in that occupation?

A. More than 30 years.

Q. In your occupation as a civil engineer, have you had occasion to estimate the loss of water that would run through a canal in this

country, from the head to the mouth of the canal by reason of seepage and by reason also of evaporation?

A. Yes sir.

Q. Are you acquainted with the San Joaquin & Kings River Canal?

A. I have been over most of their works.

Q. Have you ever made an estimate of the loss of water that would run through that canal from the head to the mouth of the canal by reason of seepage and evaporation?

A. Well, I made some estimates by comparison with the canals with which I have had experience in Kern county.

Q. But you have investigated the Kings River canal for the purpose of making estimate?

A. Yes sir.

Q. Of that loss?

A. Yes sir.

Q. How did you proceed in making that estimate there?

A. We drove along the canal from Newman to the head.

Q. And observed the amount of seepage?

A. Yes.

Q. And of course made your calculation of evaporation from your knowledge as a civil engineer and from your experience with other canals.

A. Yes sir.

Q. Now where did you take the point from which you would estimate the loss by reason of seepage and evaporation on this canal, San Joaquin & Kings River canal, in Fresno county? At what point did you begin at?

A. We went from the head or went rather from the lower end up to that.

Q. Well I am speaking of the calculations that you made. From what point did you make that calculation?

A. Well as a matter of fact I did not make notes for that purpose. I was only observing the character of the ground with reference to canals I have had experience with as indicating whether there would

be a greater or less loss by evaporation and seepage than the canals on which I have made observations, and I went over the figures with Mr. Schuyler which he has presented here and that is all the knowledge I have of the different locations or different points from which he segregates the different portions of the canal.

Q. Well, how would your estimate compare with that of Mr. Schuyler? You have heard his testimony in relation to the loss that will be occasioned?

A. I think his figures are very conservative. They agree with my experience in the Kern county canals.

Q. Do you think there is any difference between the canals in Kern county, or there would be a loss, or a difference in the loss by reason of evaporation or seepage in Kern county?

A. I think in the canals in question the loss would be greater than in any of the canals that we have in Kern county.

Q. You think that the estimate that Mr. Schuyler testified to here is a conservative estimate.

— Yes sir.

Q. Of the loss that would actually occur there by reason of seepage and evaporation in that canal.

A. Yes sir.

Q. At the middle point in Fresno, Merced and Stanislaus counties.

A. Yes sir.

Q. As testified by him.

A. Yes sir.

Q. You made no calculation of your own independent of that calculation that was made?

A. No.

Q. Did you assist in making the calculations that Mr. Schuyler has made?

A. No, I did not assist in it; I went over the figures afterwards.

Q. But you went over the figures and verified them?

A. Yes sir.

Q. And over the ground?

A. And over the ground.

Mr. FARRAR: I think that is all.

Cross-examination.

Mr. TREADWELL:

Q. Mr. James, you for a great many years have had charge of quite a large number of canals in Kern county, haven't you?

A. Yes sir.

1829 Q. Have you ever made any actual measurements on any of those canals to find out how much loss there was?

A. We have in a general way observations on those canals all the time. The water is measured into the canal and measured out, and the difference between the quantity measured in and the quantity measured out would indicate the loss.

Q. Well, now, would you just tell us about one of those canals, how you found it to actually work there?

A. We have what we call the East Side canal which is a branch of the Kern Island canal and it is constructed through very favorable ground, some hardpan and ground that is not leaky at all, and when I turn 100 feet of water into the canal in a distance of 15 miles we only turn out about 70 feet; that is even after the canal has been full of water for quite a period of time we only get seventy per cent out of the 100 feet.

Q. In 15 miles?

A. In 15 miles, and the Calloway canal which carries some 900 feet of water—don't often have that much in it, but we often have 6 to 700 feet of water, and that has a length of 32 miles. The first three miles in very bad ground, right down an old river channel and the loss is very great, the loss is something like 8 per cent in that distance; not counting that section of the canal, the balance of

the way is very favorable ground, much more favorable than the ground of this San Joaquin & Kings River canal, and the loss there is similar to the estimate made by Mr. Schuyler on this canal here.

Mr. TREADWELL: That is all."

1830 In the Matter of Fixing the Maximum Rates Which the San Joaquin and Kings River Canal and Irrigation Company, a Corporation, Shall Charge for Water for Irrigating Purposes in Stanislaus County.

The above entitled matter came on regularly to be heard before the Board of Supervisors of Stanislaus County, State of California, this 25th day of June, A. D. 1907, the same having been regularly continued from the 14th day of May to the 12th day of June, 1907, and continued by mutual consent from June 12th to this date.

Present a full Board: A. E. Clarey, Chairman, J. W. Davidson, M. A. Lewis, John Dunn and J. J. McMahon.

Attorneys for Petitioner, the San Joaquin and Kings River Canal and Irrigation Company: W. B. Treadwell, Esq. and Frank H. Short, Esq.

Attorney for Stanislaus County: L. J. Maddux, Dist. Att'y.

CHAIRMAN (CLAREY): This is the time fixed for the hearing of the matter of fixing water rates of the San Joaquin and Kings River Canal Company in this county. What is the first order of business?

Mr. MADDUX: We will take Mr. Goodwin first.

1831 R. H. GOODWIN called for cross-examination, testified:

Mr. MADDUX:

Q. Mr. Goodwin when did you make an investigation of the canal?

A. Lately.

Q. I say when did you last make an investigation?

A. In December 1906.

Q. In December 1906.

A. Yes sir.

Q. Did you make these measurements and calculations at that time that you have produced here?

A. Not all of them. I took the data from prior reports.

Q. Yes; how much time did you spend in December going over this canal?

A. About fifty or sixty days. I don't remember exactly but somewhere along there.

Q. Well were you taking measurements?

A. No, I had all the data from prior reports.

Q. Yes.

A. Taking as a basis the last report, which I think was in 1904.

Q. 1904; did you go over it then?

A. I did, in detail.

Q. Was that the report you submitted in Merced and Fresno counties before the Boards of Supervisors?

A. Yes.

Q. Now you made a report and investigation of this canal prior to that time, didn't you?

A. Yes.

Q. When was that?

A. 1896.

Q. 1896. Now in your last report, the report you filed here, what did you estimate the value of the canal system to be?

A. I haven't got the figures proper; I think you have them there.

Mr. TREADWELL: It is in there but it is not added up, however.

Q. You say you did not add them up?

A. No, I did not add them up.

1832 Q. Do you know what the aggregate amount is.

A. No. I did not add them all up.

Mr. MADDUX: Do you know the aggregate amount?

Mr. TREADWELL: I have footed it up but I did not bring my footings with me to-day.

Q. Well what is the approximate amount?

A. Something like a million dollars.

Q. A million dollars.

Mr. TREADWELL: I can tell you approximately, it is \$1,120,000 and odd; I cannot come nearer than that.

Q. Now prior to that time you made a thorough investigation of this canal didn't you?

A. Yes sir.

Q. Is this your report at that time, 1906—or 1896? (Showing.)

A. That is my handwriting, yes sir.

Q. Examine the report.

A. Yes sir.

Q. That was when you were employed by the county of Stanislaus.

A. Yes.

Q. To go over this, you and Mr. Grove.

A. Yes.

Q. At that time you estimated the value of this canal to be in round numbers \$251,000 didn't you?

A. Yes.

Q. What has increased the value, that \$251,000 up to \$1,120,000 in the last 12 or 13 years?

A. Well there has a great deal of canal work been done.

Q. Canal work been done where?

A. In—On the system; say the outside canal.

Q. Has there \$900,000 worth of work been done since then?

A. No.

Q. What's that?

A. No, not at those prices. That estimate was based on the prices of material and labor at that time.

Q. Yes.

A. Labor and material at present are different.

Q. Yes. Take the canal in the county of Stanislaus, is it of greater value now than it was then?

1833 A. Well yes it would be. What do you mean by value? Would it cost more to build it? or—

Q. No, in 1896 you put the valuation of the whole system at \$251,000, now you put it at \$1,120,000; now I ask you in 1896, how does the value of the canal in Stanislaus County compare now with what it was in 1896?

A. In Stanislaus County?

Q. Yes.

A. Well it has practically no more work nor no more structures put on *them* there was in 1896; there may be a few more.

Q. Yes.

A. But the valuation of it is derived from the price of labor and material.

Q. Now in—Didn't you testify before the Board of Supervisors in 1896 that the depreciation was 70 per cent?

A. I suppose I did.

Q. Yes; that is the depreciation. Now has any of this canal been reconstructed or rebuilt since 1896?

A. Of Stanislaus?

Q. No, I am saying of the whole system, that is, of the main canal that irrigates Stanislaus county?

A. Oh, yes, there is an awful lot of work been done there since 1896.

Q. Well I say on the main canal which irrigates the county of Stanislaus, has anything new been done to that?

A. Oh, yes.

Q. What?

A. You mean that portion that lies in Stanislaus County?

Q. No, I mean the whole canal, I mean the whole main canal that irrigates the county of Stanislaus.

A. You mean from the headgates down?

Q. Yes; I am not talking about these side canals.

Q. The main canal?

Q. Yes.

1834 A. Why certainly, there has lots of work been done.

Q. What work has been done?

A. There has a new diverting dam been put in.

Q. Where is that?

A. That is on the San Joaquin river.

Q. A new diverting dam; was that necessary?

A. Why, certainly.

Q. Where was that dam constructed?

A. At the headgates, just a little below the headgates.

Q. What is the value of that?

A. I give it in the estimate.

Q. Well, I say, do you remember?

A. No I don't remember any figures; you will find it classed in the headworks.

Q. (Handing reports.)

A. I estimate the cost of that San Joaquin river weir at \$54,000.

Q. \$54,000; that has been constructed since——

A. Since 1896.

Q. Yes; now anything else?

A. Oh the main canal?

Q. Yes, on the main canal.

A. There is also a headgate or controlling gate at what they call China Slough of \$3,000.

Q. Yes; anything else?

A. Controlling weir gates at—on the head canal—main canal two miles and a half or three miles down the canal.

Q. What's that?

A. There is a headgate about two and a half miles below the head-gates, that was put in since.

Q. How much was that?

A. That is about \$3,000—or \$4,000.

Q. Was that necessary to bring the water down to Stanislaus County?

A. It is necessary to control the water——

Q. Yes.

A. —to bring it down; to operate the canal.

Q. Well, something else? What else?

A. The canal has been widened.

Q. For what purpose?

A. Made deeper to carry more water.

Q. For what purpose?

A. To carry more water in order to deliver water in Stanislaus County.

Q. To deliver more water in Stanislaus County?

A. I believe so.

Q. Yes.

A. To make it carry more water.

Q. Didn't the Company increase the acreage above the canal and didn't that the purpose of carrying more water?

A. That I don't know sir; I don't know what it was done for except the canal wasn't large enough to carry the water that was added below.

Q. Yes; don't you know they started a branch canal and ran it near the mountains and commenced to irrigate other land?

A. Yes in 1896 the Dos Palos system was in operation.

Q. Yes, sir.

A. Although it wasn't included in my report on that day because I didn't know it belonged to it.

Q. Now the upper canal, isn't there an upper canal now, a canal has been constructed of late years?

A. Yes, that was built I think about 1897.

Q. 1897.

A. Somewhere in that neighborhood.

Q. Now do you figure that in as an addition?

A. I do; it is in the canal system.

Q. I know, but wasn't that for the purpose of irrigating lands that were above the old canal.

A. Yes but—No, not wholly; they have outlet gates that bring some of the waters down to the main canal.

Q. Yes; well they have a parallel canal haven't they?

A. They have a parallel canal and a main canal.

Q. Yes, and this other canal wasn't that constructed for the purpose of irrigating lands above the canal that the old canal could not irrigate?

A. Yes sir, I suppose in the main it was.

Q. Yes. And wasn't that widened and deepened for the purpose of furnishing that canal with water and those people?

A. What, the outside canal?

Q. Yes, the outside canal.

A. Why they could not—if the main canal be deepened it wouldn't supply the outside canal which is on a higher level.

Q. Well is not that a branch of the original canal?

A. Not the outside canal, no sir.

Q. Where does that start from?

A. It starts from the same headgate—about the same headgate, but goes off on a higher level.

Q. Yes; now anything else?

A. Well, there might be a few—

Q. What was the cost of this widening and deepening?

A. I don't know, I would have to go to work and take the difference between the 1896 report and the present report to get that.

Q. Haven't you any data from which you can tell anything about it?

A. Not at hand, readily.

Q. Now you say none of these things were there in 1896 that you have mentioned?

A. Well there was an old brush dam that was used; but that brush dam was taken out and this work was put in there.

Q. There was a dam there at the time.

A. Yes at the time, a brush dam.

Q. Now is there anything else that has been done since to increase the valuation?

A. Oh there are lots of new structures, stopgates and outlet gates.

Q. Well, about what is their value?

A. Oh aggregate? I don't know.

Q. \$20,000?

A. Yes, I guess it would be.

Q. \$30,000?

A. It is pretty hard work to go over a system of this kind and segregate what is old and what is new.

Q. I know, but you have been over it three times haven't you.

A. I have, yes, but I cannot carry everything in my memory. It would take me two or three days to go to work and figure out what you want.

Q. Can't you tell from your data?

1837 A. No, because I would have to check from a terminal to see which is which. They are all numbered by stations.

Q. Here is the prior one isn't it? (Indicating.)

A. That is the one of '96?

Q. Yes.

A. Would you like to go through the whole list of that?

Q. No, but I am asking you if you could tell in a short time?

A. Oh, I can't tell each one of these structures whether they were put in in 1896! The only thing I could tell would be the station number.

Q. Well, now, how do you make the difference between \$251,000 and \$1,120,000. How do you make it up?

A. It is the different prices of material. The cost to put that structure in at the present time would cost more than it did in 1896, or build the whole system.

Q. \$900,000 more?

A. I think it would. Well you must remember in the report of 1906 (1896) there were a great many things that weren't there, that are at the present time.

Q. Well what things were those?

A. Well as I said, the outside canal was built; there was a drainage canal built; the Dos Palos system has been extended; several outlet canals, mostly all south of the Los Banos Creek.

Q. Yes.

MR. TREADWELL: If you will allow me, I don't want to interrupt your cross-examination, but the report which Mr. Goodwin has made is and was under our direction on the entire system, but that does not mean that we contend that all of that system is useful to Stanislaus County at all; we do not claim for example that the outside canal of the Dos Palos systems are of any use to Stanislaus County, although the outside canal is a little, but still we are not figuring it and have no proof about that; so we do not consider those things, as far as Stanislaus County is concerned.

1838 Q. Well have you any means or data from which you can arrive at the value of the canal system which furnishes the county of Stanislaus with water, leaving out all this other as Mr. Treadwell suggests.

A. I think you can take the main canal and the parallel canal.

Q. Well you have your data there, now can you arrive at it? Segregate the canal that furnishes the County of Stanislaus with water from all the others.

A. In the first place the headgate is chargeable to Stanislaus County, or a certain portion of it.

Q. The whole of it?

A. Oh no, a certain proportion of it.

Q. What proportion?

A. That proportion I don't know as I could tell just now; I haven't given it any thought. But that would be the first item, all the headworks are chargeable to the whole system pro rata.

Q. Have you no way of estimating what is chargeable to Stanislaus?

A. No, I haven't given it any thought whatever.

Q. Well now aside from the headgate what is the value of the remainder?

A. Well in Fresno County the canal—main canal is estimated at \$106,215.00.

Q. How much?

A. \$106,215.00.

Q. Yes.

A. The parallel canal in Fresno County is \$50,200; the item of outside canal and the outlet canal Nos. 1, 2 and 3, they cut some figure.

Q. I just simply want that which brings the water to Stanislaus.

A. Well, omit that and just say the main canal; in Merced County the main canal was \$74,069; the main canal extension was \$139,652.00—

Q. What is that? The main canal extension?

Mr. TREADWELL: That is from the Los Banos Creek to the line of Stanislaus County.

1839 Q. How much?

A. \$139,652.00. That canal originally only ran to the Los Banos Creek; from there on it is called an extension.

Q. Yes.

A. The parallel canal in Merced County is \$58,882.00; in Stanislaus County the main canal extension "A" \$40,363.00; the main canal extension "B" \$29,097.00.

CHAIRMAN: Please give me that last item again; the main canal extension.

A. Extension "B"?

CHAIRMAN: The main canal extension, the last item you gave.

A. Extension "B", is \$29,097.50.

CHAIRMAN: Thank you.

Q. That makes \$398,448.00. Now what else do you charge up to the County of Stanislaus?

A. I think it should—

Mr. TREADWELL: That does not include the headworks.

Mr. MADDEX: I know; I am asking him.

A. The headworks: the items of the San Joaquin River weir, the Controlling Weir at Headgate, Head Gate on the Main Canal, Headgate on China Slough, Canal Station at Head Gates, Machinery and Tools, Surveying and Telephoning instruments, Office Furniture, all amounts to \$84,732.00.

Q. Now you charge that up to the whole system, don't you?

A. Yes.

Q. Now what proportion do you charge up to the system that irrigates the County of Stanislaus?

A. Well, I have never given it any thought.

Q. You have no way of estimating that.

A. I have got to think about that to see what proportion to give to it.

Q. Well in your previous report in 1896 you charged that all up to the main system didn't you?

A. I believe it was all charged right up irrespective of 1840 any—

Q. Yes; adding that to this makes \$473,000.

Supervisor McMAHON: 5 I think instead of 4, Mr. Maddux.

Mr. MADDUX: Yes—That makes \$573,180.00.

Q. Now your former estimate in 1896 was \$251,000, now it is \$573,180.00; now how do you make up the difference? How do you account for that increase?

A. Well I think that the earthwork was taken at seven cents a yard in 1896 and I take it at ten cents a yard now.

Q. Can't you get it done over there for four cents?

A. How's that?

Q. Can't you get it done over there for four cents?

A. I would like to see a man contract for it.

Q. Well, I am asking you if you cannot?

A. No, I don't think you can.

Q. Or five cents?

A. No, sir; I don't think you can.

Q. Isn't it a fact the witnesses on the prior examination of this in 1896 testified that it could be done for five cents?

A. In 1896?

Q. Didn't you produce a number of affidavits yourself to substantiate your statement in regard to it?

A. 1896?

Q. Yes.

A. I may have done so, yes sir.

Q. Yes sir; now you say you estimated it then at seven cents.

A. At seven cents?

Q. You estimated, you say in 1896, at seven cents.

A. Yes.

Q. Isn't it a fact you have estimated it at five cents then and you produced a number of affidavits to substantiate your testimony on that proposition?

A. I believe so.

Mr. TREADWELL: I would like to ask this: It is a fact isn't it that the testimony on that occasion was in writing and was preserved here?

1841 Mr. MADDUX: No, I only just have your transcript.

Mr. TREADWELL: Well, it was taken down in writing wasn't it? You have it in writing or print.

Mr. MADDUX: Yes.

Mr. TREADWELL: Then I submit you ought to read it to the witness or allow him to see it.

Mr. MADDUX: Well, I know, but the printed testimony is a special statement gotten up by the attorneys and is not always the testimony of the witness.

Mr. TREADWELL: That is not a statement gotten up by the attorneys, that is a copy of the testimony; the attorneys had nothing to do with it, it came from the Clerk of the court.

Mr. MADDUX: It was in the trial in San Francisco, the taking of testimony before Commissioner Heacock in San Francisco, wasn't it?

Mr. TREADWELL: Mr. Goodwin did not testify there; he only testified before this Board and a transcript of his evidence was introduced there and that will show just what the testimony was.

(Mr. MADDUX:)

Q. Well, now go on and state how you arrive at this difference?

A. In 1896 lumber was taken at \$13.00—No—Yes, \$13.00.

Q. How much?

A. \$13.00, and pine was \$11.00. At the present time lumber is taken at \$27.00 per thousand.

Q. Well that is for new lumber isn't it?

A. Yes.

Q. But when you figured—

A. This was for new lumber too.

Q. When you figured it before you figured a depreciation on that of 70 per cent didn't you?

A. As a cash valuation.

Q. Now did you figure this lumber at \$27.00 new, did you figure that at a depreciation of 70 per cent in this report?

1842 A. No; the figure on depreciation don't enter at all in this report.

Q. Oh, your report is based solely upon the whole thing as absolutely new.

A. Reproduction.

Q. Reproduction.

A. Yes.

Q. You do not figure a depreciation of seventy per cent in this report, on lumber.

A. I have left the question of depreciation out entirely.

Q. Left that out entirely.

A. Yes sir.

Q. So then your report does not state then what the actual cash value of the canal is at this time.

A. No sir.

Mr. MADDUX: That is all.

Redirect examination.

Mr. TREADWELL:

Q. Mr. Goodwin in that connection I will ask you whether or not you found that the canal had in fact depreciated, or the structures on it? Are they or are they not worth as much as new ones to-day?

A. As a cash value, no sir.

Q. I mean for the purposes for which they are designed, are they now as good as new ones would be or are they not?

A. They are just as good for the purposes for which they are intended.

Q. Now you have been asked to give some figures as to the values you placed and which have been commented on here; I will ask you whether in those values you have included the value of the lands occupied by the canal right of way?

A. I have not.

Q. Your report does not show that at all.

A. No sir.

Mr. TREADWELL: You were asked that question before, but I thought I would recall it. That is all.

1843 Recross-examination.

Mr. MADDUX:

Q. The reason you did not include it in your report is that the Canal Company never paid anything for the land, isn't it?

A. No, I didn't put their real estate in; there is none of that in it.

Q. They simply had a right to go over it.

A. I paid no attention to that; I merely made the——

Q. Yes.

A. —item here that there were rights of way, and that is all, giving the amount of the right of way.

Mr. MADDUX: That is all. Before you get off the stand I will offer these two statements in evidence—this itemized statement of lumber, and also the other one, of the former report.

Mr. TREADWELL: You mean the report of 1896.

Mr. MADDUX: Yes.

Mr. TREADWELL: Yes.

Mr. MADDUX: We offer those in evidence as part of the testimony. (Statements marked "Defendants' Exhibit 1" and "Defendants' Exhibit 2.")

C. E. SLOAN, called and sworn as a witness on behalf of the defendants, the Water Consumers, testified:

Mr. MADDUX:

Q. What is your name?

A. Charles E. Sloan.

Q. Where do you live?

A. Austin, Nevada.

Q. You formerly lived here?

A. In Modesto, yes sir.

Q. What position did you hold in this county for a number of years?

1844 A. I was deputy county Surveyor.

Q. Yes; what is your business?

A. I am an engineer.

Q. Yes; how long have you been in that business?

A. About fourteen years.

Q. Yes; what has been the extent of your experience in that business? What places have you followed your profession?

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A. Well principally in the Western part of the United States and British Columbia and Mexico and South America.

Q. Yes, you have been following that in almost all points on the Pacific coast have you not?

A. Yes.

Q. Did you make an examination of this canal system of the San Joaquin and Kings River Canal and Irrigation Company.

A. Yes sir.

Q. In conjunction with whom?

A. With Mr. Smith.

Q. Yes; did you make a report to the Board?

A. I did.

Q. Is this that report? (Showing.)

A. Yes sir, it is. (Report handed to counsel.)

Mr. MADDUX: I offer this in evidence. I will simply state that the present cash value of the canal system is placed at \$335,456.62. (Report marked "Exhibit 3, N. E. L.")

Q. Now in arriving at that estimate did you arrive—make a liberal estimate or a close estimate?

A. Well, I think it has been very liberal.

Q. Yes; a very liberal estimate.

A. Yes sir.

Q. And that report is correct, is it?

A. To the best of my belief, yes sir.

Mr. MADDUX: Take the witness.

Cross-examination.

Mr. TREADWELL:

Q. Mr. Sloan in what branches of engineering have you been particularly engaged?

A. In mining engineering and railroad engineering.

Q. Have you ever had anything to do with the construction of canals anywhere?

A. Somewhat.

Q. Where?

A. Here in Modesto.

Q. And where else?

A. None outside of this.

Q. Now what canal or works of that kind were you engaged in in the vicinity of Modesto?

A. Well, principally in private ditches; really you could not call them canals, they were too small.

Q. Small ditches?

A. Yes.

Q. How long ago was that?

A. About—well, it has been within the last four years.

Q. What acquaintance have you or had you at the time you made this examination, with the prices of labor and materials in

this Valley at the present time, or at the time you made your examination?

A. Well I am pretty familiar with the prices of labor and material and prices.

Q. How did you become familiar with them?

A. By inquiry.

Q. How?

A. By inquiry.

Q. You had no personal experience with regard to it, did you?

A. Not in the last six months, no sir.

Q. Well, within the last year?

A. Yes.

Q. What?

A. Well, I know what common laborers have been getting here—
No, I will correct that, I will say not within the last year, no.

Q. That is what I ask you now, within the last year.

A. Not within the last year.

Q. You do not know yourself then what common laborers are getting around here.

A. Well, I think I do, yes. I haven't hired them and paid them.

Q. How do you know? How did you become acquainted with it?

A. Well, because I have asked a great many men around there who were employing men.

Q. That is the only way you do know.

1846 A. I said I had never employed any in the last year; no sir.

Q. Have you had any business occasion to compute, for example, the cost on special work so you could bid on it?

A. Within the last year?

Q. Yes sir, here in this Valley.

A. No sir.

Q. Or the cost of lumber? Have you had any occasion to buy lumber or have estimates or bids on lumber?

A. Let me understand just what you mean by this Valley? Do you mean the price of lumber in San Francisco?

Q. Well, have you ever bought it in San Francisco?

A. Yes.

Q. When have you had to buy it for use in this Valley?

A. Well I haven't bought any for use in this Valley but I have bought it in San Francisco within a year.

Q. Then you are acquainted with the price of lumber in San Francisco within a year?

A. Yes.

Q. Now in making the estimates you have made here I observe you have no items, so I will have to ask you what you mean by these. How much do you estimate the cost of the earthwork per cubic yard on this canal, the present cost to-day.

A. Part of that is estimated at five cents, part of it at six cents and part at seven cents per cubic yard.

Q. Have you known of any, known or ever heard of any occasion Mr. Sloan, within the past year, when any earthwork of that kind has been done for as low as five cents?

A. Yes sir; for as low as four cents.

Q. Where?

A. Well, this side of Stockton.

Q. Well—

A. In land very similar to that.

Q. Can you give us the name of the person or place so we can ascertain in regard to this? We are in the business and we would like to know where to go to get work done. Now where can it be done for such a price?

A. I could not give you the name of that particular man now, but

I can give you the name of a party on another piece of work.
1847 Q. Give us some.

A. Over at Elmdale.

Q. What was done there?

A. Mr. Leister did some work there.

Q. What did he do?

A. Canal work very similar to that, and he contracted it at five cents.

Q. And how much of it?

A. Well, I don't know in regard to the yards but it was a job that took eight or ten teams all summer.

Q. What sized canal, approximately, was it?

A. Well I believe that the largest canal there is possibly 18 feet on the bottom and the smallest would be about six.

Q. And what did you compute the price of lumber, that you state here, at?

A. The price of redwood I figured at \$33.00 per thousand delivered on the canal.

Q. And how much for other lumber?

A. \$28.00 a thousand delivered on the canal.

Q. Now you have stated here a certain number of cubic yards of earthwork in this canal, you do not however give any items. How did you ascertain the number of yards?

A. I had to take that from Mr. Goodwin's report, the one that is in that book there—in that transcript.

Q. Then you simply assumed Mr. Goodwin's report to be correct and you have—

A. Yes; I didn't assume it was correct for I went over his figures that he submitted in this case in 1896 to see that there were no mistakes in the multiplication, is all; aside from that I took his figures.

Q. Then you have not included—in your report you have not included any work that was done since 1896.

A. Yes, sir, I have.

Q. Well, how is that, if you have just taken Goodwin's figures in 1896?

1848 A. Well; there is the Orestimba outlet canal or branch canal that Mr. Goodwin put in, I have included; and also the Dos

Palos canal. I have included everything under the Dos Palos system in this report. I haven't segregated it however.

Q. No, I see you haven't segregated anything.

A. No sir; that report includes everything under the main canal, the Dos Palos canal and all its branches, and the Orestimba branch.

Q. Are there any other figures in here which you got by independent investigation and not from Mr. Goodwin's reports? Did you measure anything in this canal yourself?

A. I measured all the gates, drops, weirs, stopgates, outlet gates—outlet boxes, the bridges and buildings.

Q. Have you your notes of those measurements?

A. I have some of them; some of them—

Q. You could not give us a detailed statement then as Mr. Goodwin has?

A. Yes sir.

Q. When can you do that?

A. Mr. Maddux has it in front of him there.

Q. Is this the paper to which you refer Mr. Sloan? (indicating).

A. Yes.

Q. Well now, you will observe that that paper simply contains a list of figures; it does not in any case show where any of those are, which gates or where they are or what the dimensions of them are, other than a list of pages and figures, is not that correct?

A. I don't know as I understand just what you mean by that?

Q. Is there anything in that report which you hold in your hand that shows any particular structure, that we could identify as a particular structure, and say you measured it correctly?

A. You mean identify it on the ground?

Q. On the ground, yes.

A. With reference to how far it is from the end of the canal?

Q. Yes, or any way of identifying it at all; is there anything there more than a series of figures that you estimate, without showing what they belong to?

A. Well, yes.

Q. What, now? I don't see anything else myself.

A. You didn't look far enough.

Q. Well, I glanced over it. That is the reason I ask you, because you are familiar with it.

A. Well, at the conclusion of each one of these columns of figures there is the total number of bridges, for example.

Q. But that is all. What I am asking, you have simply given certain totals there, that is the way it looks to me.

A. Yes.

Q. But I don't see anything there by which you could ascertain what your measurement was on any particular gate or bridge or dam or anything else. In other words, anything by which we could check your figures.

A. Well the only way you could check them would be to go over the entire system.

Q. That is to add them all over again and see whether our totals are the same as yours.

A. Yes sir.

Mr. SHORT: We might start in on the wrong end though.

WITNESS: Well it wouldn't make any difference if you went over all of it.

(Mr. TREADWELL:)

Q. And if we came out different we would not know where we missed yours?

A. Well, the first two items here are two stopgates 24 x 30, now if you only had one of them checked off when you got through you must have missed one or else I have got one too many. I think you can check up though so you can tell whether it agreed with what is on the canal or not. It will not agree with Mr. Goodwin in regard to the number of bridges for this reason, that there are a great many county bridges on the canal that I believe Mr. Goodwin has included.

1850 Q. Are not you aware of the fact that those bridges were all built by the Canal company at the expense of the Canal Company; the Law requires them to build them at their own expense.

A. I was not aware of it.

Q. And that none of those bridges were built at the expense of the county?

A. I am aware some of them were not built at the expense of the county, but am also aware that I have had occasion to have several of them repaired at the expense of the county since they were built. Mr. Clary who is the supervisor on the West Side over there keeps them in repair.

Q. Has that anything to do with the building of them?

A. No sir, it has nothing to do with the building of them.

Q. You do not know as a fact who did build them, do you?

A. No, I don't know anything about who built them.

Mr. TREADWELL: That is all.

Redirect examination.

Mr. MADDEX:

Q. What is the condition of the canal at the present time?

A. The canal is not in very good condition at the present time.

Q. What is the matter with it?

A. Well there is a great deal of grass in it; a great many breaks in the banks; and the material that is in the drops and in some of the bridges and checks are very badly totted; some of it is very poor.

Q. Yes.

A. Then the canal is very badly silted in other places.

Q. Very badly silted.

A. Yes.

Q. To what extent?

A. Well I could not say just to what extent.

1851 Q. Now to what extent is this lumber rotten that is there?

A. You mean on the whole—the entire system?

Q. Yes; about what per cent is decayed lumber, old lumber.

A. Well take all the lumber that is in the system now, if valued at from fifty-five to sixty per cent. of new lumber it would be a very liberal valuation; take it all the way through.

Q. What?

A. 55 to 60 per cent of new lumber would be a very liberal valuation of it.

Mr. MADDUX: Yes; that is all.

Mr. TREADWELL: That is all.

BURTON SMITH, called and sworn as a witness on behalf of defendant, the Water Consumers, testified:

Mr. MADDUX:

Q. Mr. Smith what is your first name?

A. Burton, Burton Smith.

Q. What is your business?

A. Engineer.

Q. Yes; how long have you followed that business?

A. 16 years.

Q. Yes; do you know the San Joaquin and Kings River canal?

A. Yes sir.

Q. Were you ever employed on that?

A. Yes.

Q. For how many years?

A. Ten months.

Q. Ten months. Had you lived in the neighborhood of the canal for any number of years?

1852 A. For two years and eight months I think or something near that.

Q. Yes; while you were employed on the canal for those ten months what were your duties?

A. I was superintendent of the canal.

Q. Superintendent of the canal.

A. Yes.

Q. The whole canal?

A. Yes, the system.

Q. What is your business now?

A. I am superintendent of the Turlock Irrigation District at the present time.

Q. The Turlock Irrigation District canal.

A. Yes sir.

Q. Do you know the extent of that canal?

A. Do I know the extent of it?

Q. Yes.

A. Something near 180 miles.

Q. How does it compare in size with the Kings River Canal—San Joaquin and Kings River canal.

A. Well it is a larger system.

Q. It is a larger system.

A. That is it is more extensive.

Q. Yes; now in conjunction with Mr. Sloan did you go over and make an examination of the canal?

A. Yes sir.

Q. Did you sign this report with him? That is your signature is it? (showing.)

A. Yes.

Q. You and he made an estimate.

A. Yes sir.

Q. Was that a liberal or a close estimate you made?

A. I consider it a very liberal estimate.

Q. What is the condition of the canal?

A. Very poor.

Q. Very poor. Well in what does that consist of?

A. Well there are a great many breaks, the banks have been injured by overflows, etc., pretty nearly the entire length of the canal; and it is very badly silted in in places, decreasing the cross-section by I should say 30 or 40 per cent.

Q. Now as to the lumber which is in the canal or that is used in the drops and other parts of the canal, what is the condition of that at the present time.

A. Portions of it is good, other portions of it is very poor.

Q. Yes; now about what per cent of depreciation would it be, would you consider it, from new lumber?

A. Taken as a whole?

Q. Yes sir.

A. I should say fifty per cent.

Q. Yes; this report you have filed is correct is it, so far as you are able to ascertain.

A. As far as I know, yes sir.

Mr. MADDUX: Take the witness.

Mr. TREADWELL: No questions.—Well, I will ask you one question:

Cross-examination.

Mr. TREADWELL:

Q. Mr. Smith, when were those ten months you were employed on this canal?

A. From the first day of January to the first day of November in 1904.

Mr. TREADWELL: That is all.

Mr. MADDUX: That is all.—I will offer this detailed statement in connection with the witness' testimony.

(Statement marked "Exhibit 4. N. E. L.")

E. S. WANGENHEIM, called and sworn as a witness on behalf of Defendants, the Water Consumers, testified:

Mr. MADDUX:

Q. Mr. Wangenheim you reside at Newman.

A. Yes sir.

Q. And you are manager of the firm of Simon Newman Co.

A. Yes sir.

Q. And a partner, are you?

A. Yes sir.

Q. Are you familiar with the canal that irrigates the county of Stanislaus known as the San Joaquin and Kings River Canal and Irrigation Company's canal?

A. Yes sir.

1854 Q. Do you know what condition that now is in; have you examined it lately?

A. Not particularly, only by driving along; haven't made any examination with a view of testifying to anything about it.

Q. Well do you know anything about the rights of way that the Company had there? Know whether they paid anything for the way or not?

A. Well I never heard of them paying for anything.

Q. Well did they go through your lands—lands of your Company?

A. Well, I don't know whether—

Mr. SHORT: Of course that is objected to; subject to the objection it is immaterial and irrelevant.

Mr. TREADWELL: I suppose it is not necessary for us to make any objection at all.

Mr. MADDUX: I don't think it makes any difference whether you do or not.

Mr. TREADWELL: At any rate we are not making any; are willing to answer any questions you wish.

Mr. MADDUX: All right.

Q. What is that? What were you going to say?

A. I don't know whether our Company deeded any land; it wasn't a Company at that time—at the time that the canal was built.

Q. Do you know of them ever paying anything for any right of way?

A. Well I know when the right of way was given there for the canal it was given gratis.

Q. Yes; you know that.

A. I know that; and I also know that in some instances the people reserved the right to use all the land that wasn't occupied by the canal.

Mr. MADDUX: I believe that is all.

Mr. TREADWELL: That is all Mr. Wangenheim.

1855 Mr. TREADWELL: I suppose it is none of my business to testify, but I do know that the gentlemen Mr. Wangenheim represents were so public spirited that they did give the right of way; and I should expect them to do so if we had it to do again.

Mr. WANGENHEIM: We certainly would; but you have no right to tax us with a hundred dollars an acre for it now.

Mr. MADDUX: Yes.

Mr. SHORT: We will go back to the question of what the whole thing cost is if that will suit you better.

Mr. MADDUX: Well it certainly would, because I see where your manager and engineer had a row about the matter of squandering \$350,000 in construction, according to your books.

Mr. TREADWELL: Well confine yourself to the testimony, we are confining ourselves to the testimony.

Mr. MADDUX: I know, but I am answering Mr. Short.

Mr. TREADWELL: Well I could answer those things satisfactorily if it was worth my while, but I do not care to; I will stick to the testimony.

Mr. MADDUX: I think there is a mistake here in your acreage in Merced County Mr. Treadwell, you have got it eight thousand acres. I think it must be a mistake (showing).

Mr. TREADWELL: That is a mistake, of course; I didn't think to bring any of my papers. I didn't know that they would be wanted, but I remember of seeing that; that has been corrected and I did not know that we had handed you one of those incorrect copies, and if you will allow me I will submit a correct copy for it. As a matter of fact it is thirty something. It is merely a clerical error; a wrong copy was put in in some way and if the Board will consent I will substitute a correct copy for that. I have a correct copy at home.

CHAIRMAN: No objections.

Mr. TREADWELL: As a matter of fact it was over thirty 1856 thousand acres in that year.

Mr. WANGENHEIM: 38,000 probably.

Mr. TREADWELL: 38,000, I think that is what the mistake was—they didn't print the 3. I think that is the mistake.

Mr. WANGENHEIM: Didn't print the 3.

Mr. MADDUX: I suppose it is admitted that all the lands that are irrigated are included in this.

Mr. TREADWELL: Yes; that is a correct statement from our books; no more land irrigated at any time than is stated there, and I believe it is correct with that one exception we were just discussing.

Mr. WANGENHEIM: That is all land that is paid for.

Mr. TREADWELL: Yes.

Mr. WANGENHEIM: Any land that is paid for; if there is any land irrigated that is not paid for it is not on here.

Mr. TREADWELL: That is all; it simply shows just what land is paid for. As a matter of fact in some of those years there has been land irrigated which was not included in that record.

Mr. MADDUX: Another thing I would like to know while we are on that proposition, you haven't your book-keeper here so we will have to ask you.

Mr. TREADWELL: I think probably I could tell you almost anything you wish.

Mr. MADDUX: In your account for maintenance for 1906 you have "legal expenses \$21,144.90," what was that?

Mr. TREADWELL: Well there were lawsuits concerning the right to divert water from the San Joaquin river; one of those suits was with Mr. James and the James Canal Company to restrain them from taking water from the San Joaquin river away from us; the

other is a series of suits brought by Mr. Stevenson of Merced against us to prevent us from taking water out of the river.

Mr. MADDUX: That was to prevent you from taking any more than you were using in irrigating these acres of land you have testified about in these reports.

Mr. TREADWELL: It was to prevent us from taking any water; that is what the pleadings called for, that is all I can tell you. We tried—we had to try those suits.

Mr. MADDUX: But wasn't that the proposition, that you wanted more water than was necessary to irrigate—

Mr. TREADWELL: I don't know anything about the proposition, it was a suit to prevent us—to obtain an injunction to prevent us from taking any water from the river. We tried some of those suits and tried the question of how much water we had taken for more than five years.

Mr. MADDUX: Yes, and the court decided you were not entitled to any water that you had not used for five years, didn't it?

Mr. TREADWELL: Yes, and that is on appeal now to the Supreme Court.

Mr. MADDUX: Now here is labor, \$13,000 of that?

Mr. TREADWELL: That is labor performed in the—

Mr. MADDUX: Doing what?

Mr. TREADWELL: All the work on the canal except the cleaning, which you will see is kept in a separate account. It is the ordinary work on the canal—repairing breaks, putting in other boxes and putting in various structures and repairing structures; all the usual work on the canal except the item of cleaning.

Mr. MADDUX: That includes betterments also, don't it?

Mr. TREADWELL: Yes, includes everything that was done.

Mr. MADDUX: Includes permanent improvements.

Mr. TREADWELL: Includes everything that was done; but then there was nothing—there were no additions made in that year.

Mr. MADDUX: I know; but how much of it applied to permanent improvements?

Mr. TREADWELL: There was none of it.

1858 Mr. MADDUX: All repairs?

Mr. TREADWELL: All repairs and ordinary work; you may call it repairs or whatever you please—keeping the canal in order and the structure in order. Every year, as your witnesses have said, a lot of it becomes old and boards and planks and timbers have to be taken out and new ones put in. Being done every year. Then that also includes all the men at work under the section men; includes the section men.

Mr. MADDUX: That is for the whole system.

Mr. TREADWELL: The whole system, certainly. These statements include the whole system. A considerable portion of it is not chargeable to Stanislaus County at all, of course.

Mr. WANGENHEIM: How much?

Mr. MADDUX: Well now in 1906 what proportion of that do you charge to the county of Stanislaus?

Mr. TREADWELL: That is a mere matter of opinion. I have got my opinion if you care for it?

Mr. MADDUX: We would like to know that.

Mr. TREADWELL: Well I think as a matter of opinion, I think that this county should not be chargeable with either or any portion of the costs of these works or of any cost of maintaining them beyond its proportion as its irrigated acreage bears to the irrigated acreage of the other counties.

Mr. MADDUX: How many—

Mr. TREADWELL: For instance, it is shown by that statement—I cannot give it from memory, but approximately—this county probably does not irrigate more than one-fifth as many acres as Fresno and Merced taken together.

Mr. WANGENHEIM: How much of this expense should be charged to the main canal?

Mr. TREADWELL: Well I should be glad to furnish you gentlemen with those figures; I have got all my views computed at home, but I did not bring them because I didn't know you would want 1859 them, but I cannot from memory of course state any figures.

But of course anybody can see that this county has nothing to do with the canal except as it brings water to it and is used in this county, and if this county irrigates only 20,000 acres and the other counties irrigate 40,000 acres then this county would not be chargeable with more than one-third of the cost, and so on. That is my theory. It is a mere matter of theory.

Mr. MADDUX: Well this Board has to fix the rate.

Mr. TREADWELL: Yes.

Mr. MADDUX: We want them to know what part of the maintenance is chargeable.

Mr. TREADWELL: Well I understand this is a matter for the Board to determine. What I say can cut no figure; that is my opinion merely.

Mr. MADDUX: That is the difficulty, and that is why I wanted the book-keeper, in order to arrive at what is chargeable to the main canal.

Mr. TREADWELL: The book-keeper could not do it; that is a matter of law. How much is chargeable nobody can tell. The labor account is not kept that way; our books do not show that labor on a particular day was work on the main canal or on the outside canal. You have to average these things, you see.

Mr. WANGENHEIM: When you were here before Mr. Treadwell you said in this expense account was a certain amount of these legal expenses that were not chargeable. How much of that?

Mr. TREADWELL: That is shown there on that statement: There is the amount you see, \$1,232.25, now that is not chargeable in this; and so the year before and so on (showing).

Mr. WANGENHEIM: But this \$21,000?

Mr. TREADWELL: That is the Stevenson and the James suits tried, and there are a few other suits; but they are all suits relating 1860 to water.

Mr. WANGENHEIM: Those suits affected the main canal entirely, or—

Mr. TREADWELL: They affected all the canals equally; they affected our right to take water from the San Joaquin river.

Mr. WANGENHEIM: Isn't it a fact this Stevenson suit practically affects the outside canal? If the outside canal had not been built the Stevenson litigation would never have affected the amount of water that was going into the main canal?

Mr. TREADWELL: I don't understand you exactly. It affects our right to take water from the San Joaquin river without regard to any canal at all.

Mr. WANGENHEIM: They could not stop you from taking any water at all?

Mr. TREADWELL: That is what the suits call for. They did not succeed but they tried it.

Mr. SHORT: Would not this suggestion help Mr. Wangenheim: that they claimed that the old canal was only entitled to some three or four hundred feet of water and if their view had prevailed that the water that belongs to Stanislaus County would have been cut down one half.

Mr. WANGENHEIM: That is what I wanted to get at.

Mr. SHORT: Yes.

Mr. WANGENHEIM: But the legal expense of that should not be charged up equally to the whole system.

Mr. TREADWELL: Certainly not; we do not expect the Board to do that, of course. In all of these things this county should not stand more than its share and its share of course is little in comparison to the other counties.

Mr. WANGENHEIM: Now the item of taxes?

Mr. TREADWELL: That is taxes on the whole system.

Mr. WANGENHEIM: Now as near as we can tell, from the 1861 figures Mr. Goodwin gave, the main canal is 1/2 of the value of the system.

Mr. TREADWELL: Approximately; something like that.

Mr. WANGENHEIM: I see in figuring on the expense to bring them water—conceding they are all correct, although I see you have “canal cleaning \$13,000” and then “labor \$13,000” again, and I must confess that—

Mr. TREADWELL: You will find those correct Mr. Wangenheim. Those books are open to you at all times.

Mr. WANGENHEIM: That is additions on the canal; building other ditches.

Mr. TREADWELL: You are mistaken; those are not included in that statement at all.

Mr. WANGENHEIM: Well, conceding this to be correct—

Mr. TREADWELL: Kept in a separate account entirely.

Mr. WANGENHEIM: Conceding these to be correct, 1/2 of this expense would be chargeable, approximately, to the main canal.

Mr. TREADWELL: Something like that.

Mr. MADDUX: Now here is the proposition; you say your books do not show where the men worked, whether on the main canal or on—

Mr. TREADWELL: No sir; and I never saw a set of books of anybody that did; at any rate ours do not.

Mr. WANGENHEIM: I will show you a set of books that do.

Mr. MADDUX: How can you arrive at the proposition of fixing water rates on the main canal if you do not keep any books as to what the expense of maintenance is?

Mr. TREADWELL: We think we can.

Mr. WANGENHEIM: I have adopted a system of keeping ranch accounts and give the account where every man worked every day that he drew wages.

Mr. TREADWELL: Well if you have such you have to pay for it then; we are trying to run this economically.

1862 Mr. MADDUX: Well, that is our case.

Mr. TREADWELL: That is our case, gentlemen.

Mr. TREADWELL: Mr. Chairman and gentlemen, I do not propose to detain you by any discussion of these matters. I appreciate the difficulty of your situation in a matter of this kind; the law requires you in this case to do three things, one is, from the testimony to estimate the value of the works of this Company so far as they are used and useful to irrigate in Stanislaus county. Of course, as I have suggested to Mr. Maddux, we do not claim for a moment that in fixing rates here you are to consider the value of work that does not bring any water into Stanislaus County; we do not want that of course, and so with the cost of maintenance and everything of that kind. This county would not be chargeable with anything more than its due proportion. Now what that due proportion is is a matter for you gentlemen to determine, which, I am sorry, imposes a great deal of work upon you; but I have no doubt you will consider it as carefully as you can. First, then, you have to estimate from this testimony what the value of these works are so far as Stanislaus County is concerned; second, what the reasonable annual expenses of the Company are or can be expected to be in the immediate future; and third, upon those data to fix a rate which shall give to the Company not less than six per cent nor more than eighteen per cent on the amount of the valuation over and above the amount of its annual expenses. Now that looks very simple on its face and very easy, but of course gentlemen you have seen by this examination that to come down to those details and reconcile the differences in opinions and differences in the testimony of the witnesses is quite a job. I do not think I can help you on that because I would give you my side and if Mr. Maddux addresses you

he will give you his side of it. After all it is not our opinions
1863 which should govern in this but the opinions of you gentlemen, and that you will try to do justice to the Company on the one hand and the Consumers on the other hand I have no doubt myself, and I think you are entirely capable of doing so, and therefore I do not care to say anything more about this unless there is some matter that you see a difficulty about, and in that event I shall be prepared to answer, as well as I can, any question you gentlemen wish to put to me; otherwise I do not care to say anything more

on the matter, except to say that you fixed rates in 1896 and at that time following an old habit or system which had prevailed in this irrigating system the rates were made to commence on the first day of July and applied for that year. They were season rates. That being so and there never having been any change made, I think it is necessary that you should fix your rates this time so as to apply on the first day of July coming. For that reason, although it is giving very little time for you to work, I would suggest that it will be your duty to now fix the rates before the first day of July of this year.

Mr. MADDUX: Of course, upon that proposition, you haven't proceeded under that law where they fix the rates in the month of February.

Mr. TREADWELL: That is not the law Mr. Maddux; that only applies in cities and municipalities—

Mr. MADDUX: The present law under which you are operating does not fix any time; whenever you fix it then the rate changes from that time on. It don't give any first of July or any other time.

Mr. TREADWELL: For the reasons given Mr. Maddux, that cannot be so; this Board has fixed rates for a whole year. It says this Board has ordered, and we must obey that order, that we must furnish to you gentlemen water for a year for a certain price—for one 1864 dollar and a half an acre we must, or whatever price the Board fixes, we must furnish you water for a whole year; whatever water these gentlemen require we must give them, and have to keep it up for a year. Now I apprehend that year commences, as it did commence under that ordinance, on the first day of July; then it does not expire until the 30th day of June following; consequently the new rates cannot apply or be in force unless the old rates were abrogated and they cannot be abrogated as long as they are in force. The contracts are made up to the first day of July and under those contracts we have to furnish water until the first day of July. If this Board might raise those rates—presumably it might—the water consumers could not be bound because they have already paid us at the rates listed last year and we cannot charge it until that contract expires.

Mr. MADDUX: I am talking about the law; the law does not require you to fix it before the first of July.

Mr. TREADWELL: No, but it is by reason of the former ordinance this Board has passed.

Mr. MADDUX: It simply says you must apply to have them re-fix it within a year. Any time after that you can apply.

Mr. TREADWELL: Well, that is all right.

Mr. MADDUX: And the new rate commences from the very moment of making the order.

Mr. TREADWELL: Well I have stated now my understanding of it and I think the Board can see it themselves. I think they understand it.

Mr. MADDUX: Well, that is all.

CHAIRMAN: Well gentlemen, the noon hour has arrived, if you have had all the discussion you want we will adjourn until one o'clock, and if there is anything further we will be pleased to hear

from you, and if there is any information you have to impart we will be glad to hear it.

1865 Mr. TREADWELL: Well as I have said, I do not care to say anything more unless the Board desires it. I would like to ask now, because I may possibly be able to get home on this next train and am somewhat of an invalid, will the Board require me to be present this afternoon?

CHAIRMAN: I know of nothing just now. Do you Mr. Maddux, or do any of you gentlemen?

Mr. TREADWELL: If the Board will permit me I would like to go home, if I can make the connection.

CHAIRMAN: I know of nothing myself, Mr. Treadwell.

Mr. TREADWELL: Thank you.

The Board thereupon took an adjournment until one o'clock p. m.

1 p. m.—Board convened:

At 1 o'clock p. m. the Board convened, and after considering the matter adopted the following resolution:

"Resolution of the Board of Supervisors of the County of Stanislaus Fixing and Establishing Water Rates of the San Joaquin and Kings River Canal and Irrigation Company."

"The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, having presented to and filed with this Board, in accordance with section 6 of the Act of March 12" 1885, 'To regulate and control the sale, rental and distribution of appropriated water in this State, other than in any City, City and County, or town therein, and to secure the rights of way for the conveyance of such water to the places of use,' a petition praying this Board to proceed anew, in the manner provided by said Act, to fix and establish the water rates for said corporation in this County; and notice of said application having been duly published, and the Board having
1866 heard the evidence, now estimates that the value of the canals, ditches, flumes and all other property actually used by said corporation and useful to the appropriation and furnishing of its appropriated water to the inhabitants of this County is the sum of \$335,456.32; and that the annual reasonable expenses of said corporation, including the cost of repairs, management and operating said work, so far as relates to this County, is the sum of \$35,000.00, and thereupon it is ordered that the maximum rates at which said corporation may and shall sell, rent, or distribute to the inhabitants of this County, water for irrigation, are hereby fixed and regulated at the sum of \$1.50 per acre per season, from and after the first day of July, 1907.

It is further ordered that the Clerk of this Board forthwith cause this resolution to be published in full in the Stanislaus County Weekly News, a newspaper printed and published in the County of Stanislaus, State of California, for not less than thirty days after the first publication thereof. The above resolution was passed and

adopted by the unanimous vote of the Board this 25th day of June, 1907.

Attest,

S. B. MITCHELL,
Clerk of the Board of Supervisors:
By GEO. FINK, Deputy.

STATE OF CALIFORNIA,
County of Stanislaus, ss:

I hereby certify the above and foregoing is a full, true and correct statement of the testimony and proceedings had in the above entitled matter taken before the Board of Supervisors of Stanislaus County, California, on the 14th day of May and 25th day of June, 1907.

N. E. LEEK,
Official Reporter, Stanislaus County.

1867 DEFENDANTS' (WATER CONSUMERS') "EXHIBIT 3. N. E. L."

Estimated Cost and Present Cash Value of the Property of the San Joaquin and Kings River Canal and Irrigation Company.

1868 To the Honorable Board of Supervisors of Stanislaus County, State of California.

GENTLEMEN: Acting on the request of your District Attorney, Mr. L. J. Maddux, we have made an estimate of the cost and of the present cash value of the canals, ditches, weirs and other properties actually used and useful to the appropriation, transportation and furnishing of water for said system of canals belonging to the San Joaquin and Kings River Canal and Irrigation Company.

These canals are situate on the west side of the San Joaquin Valley, passing over a portion of Fresno, Merced and Stanislaus counties, State of California.

In making the attached report, we have based same on the present prices of material, labor and supplies.

Respectfully submitted,

(Signed)

CHARLES E. SLOAN,
BURTON SMITH,
Consulting Engineers.

Modesto, California, June 24th 1907.

1869

Report.

Earthwork, 3,446,218 cu. yds.	\$238,092.76
Lumber, 3,372,109 ft. B. M. in place.	133,813.56
Telephone	4,000.00
Station buildings	4,000.00
Dredger	6,400.00
Serapers, plows, tools, etc.	500.00
Horses, harness & wagons.	1,400.00

1340 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

Scow, skiff, etc.....	100.00
Engineering, Superintendency & Incidentals.....	25,000.00

Total cost	\$413,308.32
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We place the present cash value of the Canal system at	\$335,456.62
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1870 *Maintenance.*

We submit the following items of annual expenses, for maintenance of the above mentioned canal:

Salaries, Superintendent, Secretary, Bookkeeper and Section Men	\$10,300.00
Taxes—approximate	7,000.00
Office rent	300.00
Printing and stationary.....	175.00
Chaining canal 3 times per year.....	1,300.00
Horse feed and subsistence	3,000.00
Repairs	1,000.00
Pro rata per annum, on horses, wagons & tools.....	150.00
Telephone repairs	25.00

Total	\$30,250.00
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1871 DEFENDANTS' (WATER CONSUMERS') "EXHIBIT 4, N. E. L."

Estimated Cost and Present Cash Value of the Property of the San Joaquin and Kings River Canal and Irrigation Company.

Reported by Chas. E. Sloan and Burton Smith, Modesto, California, June 24" 1907.

1872 *Recapitulation.*

2,872,109 ft. B. M. in place, total cost	\$133,813.56
Deterioration	47,849.70

Present value	\$85,963.86
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3,446,218 cu. yds. earth work, total cost.....	\$238,092.76
300,000 yds. silt at 10c. per yd.....	30,000.00

Present value	\$208,092.76
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Present Value Lumber	\$85,963.86
" " Earthwork	208,092.76

Total	\$295,192.42
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1873

Summary.

Earthwork	\$208,092.76
Lumber	85,963.86
Telephone 85 miles.....	4,000.00
Station buildings	4,000.00
Dredger	6,400.00
Scrapers, plows, tools.....	400.00
Harness, wagons, horses.....	1,500.00
Scow and skiff, etc.....	100.00
Engineering, Suptey., etc.....	25,000.00
Total	\$335,456.62

1874

Maintenance.

Salaries, Superintendent, Secretary & Section Men..	\$8,500.00
Office rent	300.00
Printing and stationery.....	175.00
Bookkeeper per year.....	1,800.00
Cleaning canal 3 times a year.....	1,300.00
Horse feed	1,000.00
Subsistence	2,000.00
Repairs	1,000.00
Pro rata per annum on horses, tools & wagons.....	150.00
Taxes approximate	7,000.00
Total	\$30,225.00

1875 (Following is a transcript of "Defendants' Exhibit O" referred to on page 699 of the transcript:)

DEFENDANTS' EXHIBIT O.

Statement of Maintenance Account of the S. J. & K. R. C. & I. Co., Inc., from 1895 to 1906, Inclusive.

1895:

General Expense.....	\$747.02
Horses and Feed.....	1,259.59
Tools and Machinery.....	41.05
Subsistence	1,656.41
Lumber and Piles.....	529.52
Household Furniture.....	16.80
Instruments and Office Furniture	22.50
Telephone Expense.....	88.14
Office Rent.....	480.00
Vehicles and Harness.....	148.13

Omitting cost
of litigation as
to water rates.

Legal Expenses.....	236.00		
Taxes	2,576.31		
Salaries	4,750.00		
Expense S. F. Office.....	312.93		
Labor	4,186.83		
Repairs of Headworks.....	2,775.35		
Injunction Suit.....	1,804.50		
		\$21,631.08	\$21,631.08

1896:

Général Expense.....	578.82		
Tools and Machinery.....	1.86		
Subsistence	1,647.11		
Lumber and Piles..	1,923.10		
1876 Household Furniture.	34.80		
Instruments and Of- fice Furniture....	52.92		
Telephone Expense.....	8.91		
Office Rent.....	480.00		
Vehicles and Harness.....	257.19		
Legal Expenses.....	18.70		
Salaries	4,500.00		
Labor	4,254.75		
Horses and Feed.....	1,342.22		
Expenses S. F. Office.....	285.62		
Taxes	2,771.33		
Water Rate Contest.....	1,143.18		
Repairs to Headworks.....	2,311.59		
Injunction Suit.....	1,707.75		
		\$23,319.85	\$22,176.67

1897:

Subsistence	1,657.45		
Horses and Feed.....	1,823.73		
Vehicles and Harness.....	297.81		
Tools and Machinery.....	177.67		
Household Furniture.....	10.30		
Instruments and Office Fur- niture			
General Expense.....	689.06		
Telephone	47.49		
Lumber and Piles.....	706.38		
Labor	4,273.56		
Salaries	4,750.00		
Repairs to Headworks.....	1,054.98		
Water Rate Contest.....	41.25		
Injunction Suit.....	502.40		
Expense S. F. Office.....	185.22		
Taxes	2,778.07		
1877 Legal Expense.....	550.00		
Office Rent.....	440.00		
		\$19,985.37	\$19,944.12

1898:

Subsistence	\$2,567.20		
Horses and Feed	3,255.91		
Vehicles and Harness	329.09		
Tools and Machinery	182.45		
Household Furniture	23.33		
General Expense	640.21		
Telephone Instruments and Expense	68.62		
Instruments and Office Fur- niture	8.50		
Lumber	1,092.92		
Labor	6,406.25		
Salaries	4,750.00		
Repairs to Headworks	84.30		
Taxes	2,878.57		
Expense S. F. Office	342.21		
Office Rent	320.00		
Legal Expense	5,551.27		
Injunction Suit	9.10		
Company vs. Enterprise L. & C. Co.	1,016.58		
		\$29,526.51	\$29,526.51

1899:

Subsistence	2,582.40		
Horses and Feed	3,088.83		
Vehicles and Harness	357.73		
Tools and Machinery	433.94		
Household Furniture	54.23		
General Expense	1,154.64		
Telephone Instruments and Expense	23.30		
Instruments and Office Fur- niture	1.50		
1878 Lumber and Piles	1,445.16		
Labor	6,363.63		
Salaries	5,420.00		
Taxes	3,383.64		
Expenses S. F. Office	391.62		
Office Rent	320.00		
Legal Expense	1,021.85		
Injunction Suit	93.50		
Company vs. Stanislaus Co.	4,426.70		
		\$30,526.67	\$26,136.60

1900:

Subsistence	\$1,903.39
Horses and Feed	3,254.01
Vehicles and Harness	293.27
Tools and Machinery	5.05
Household Furniture	26.95

General Expense.....	941.74		
Telephone Expense.....	167.28		
Instruments and Office Fur- niture	60.00		
Lumber and Piles.....	867.79		
Labor	5,124.93		
Cleaning Parallel Canal....	13,252.44		
Salaries	5,507.00		
Taxes	4,109.62		
Expense S. F. Office.....	215.73		
Office Rent.....	320.00		
Legal Expense, Company vs. Stanislaus County.....	1,286.78		
		\$37,335.98	\$36,049.20

(These items could not be restored by chemist, so lumped together to make total.)

1901:

Subsistence	\$1,639.72		
1879 Horses and Feed....	1,555.68		
Vehicles and Harness.....	460.68		
Tools and Machinery.....	187.01		
Household Furniture.....	16.30		
General Expense.....	349.69		
Telephone Expense.....	318.83		
Instruments and Office Fur- niture	3.25		
Lumber and Piles.....	707.25		
Labor	5,339.02		
Cleaning Parallel Canal....	329.50		
Salaries	5,500.00		
Taxes	3,886.15		
Expenses S. F. Office.....	237.55		
Office Rent.....	320.00		
Legal Expenses.....	2,977.30		
Company vs. Stanislaus Co..	7,105.00		
		\$30,933.15	\$23,828.13

1902:

Subsistence	\$1,861.98
Horses and Feed.....	1,243.49
Vehicles and Harness.....	546.05
Tools and Machinery.....	281.76
General Expenses.....	1,246.43
Telephone Instru. and Exp.	51.44
Lumber and Piles.....	1,039.45
Labor	6,538.25
Cleaning Canal.....	277.55
Salary	5,403.33
Taxes	5,478.43

Expense S. F. Office.....	294.59
Rent, Office.....	320.00
Legal Expense.....	1,609.25
Company vs. Stanislaus Co.	1,046.60
1880 Dredge Operating and Maintenance	265.93

\$27,504.53 \$26,457.93

1903:

Tools and Machinery.....	\$256.11
Subsistence	2,658.88
Horses and Feed.....	2,325.96
Telephone Instru. and Exp.	273.33
Vehicles and Harness.....	390.43
General Expense.....	1,916.41
Lumber and Piles.....	2,210.33
Repairs and Headworks....	3,154.91
Labor	8,877.06
Taxes	4,318.04
Salaries	5,640.00
Expenses S. F. Office.....	270.13
Office Rent.....	320.00
Cleaning Canal.....	460.50
Legal Expenses.....	15,891.95
Company vs. Stanislaus Co..	1,077.45
Dredge Operating and Main- tenance	1,406.14

\$51,359.63 \$50,282.18

1904:

Dredge Construction—De- preciation	\$1,054.82
Horses and Feed.....	3,706.73
General Expenses.....	2,527.66
Household Furniture.....	100.55
Instruments and Office Fur- niture	107.63
Lumber and Piles.....	1,254.27
Subsistence	3,777.46
Telephone Instru. and Exp.	151.76
Tools and Machinery.....	294.22
1881 Vehicles and Harness.....	973.91
Cleaning Canal.....	850.34
Dredge Oper. and Main- tenance	6,941.36
Expenses S. F. Office.....	594.05
Labor	9,902.39
Legal Expense.....	13,400.00
Company vs. Stanislaus Co..	4,246.34
Water Rate Contest.....	5,807.37
Company vs. F. F. & I. Co..	750.00

Remodeling Measuring

Boxes	5,069.79
Repairs to Headworks.....	2,691.91
Salaries	6,420.00
Surveys and Plat Books....	1,670.36
Taxes	6,815.93
Rent S. F. Office.....	230.00

\$79,229.05 \$74,982.71

1905:

General Expense.....	\$3,118.48
Horses and Feed.....	3,805.94
Household Furniture.....	194.59
Instru. and Office Fur- niture	31.51
Lumber and Piles.....	1,045.22
Subsistence	4,640.33
Telephone Inst. and Exp...	310.51
Tools and Machinery.....	326.69
Vehicles and Harness.....	580.48
Canal Cleaning.....	3,490.49
Drain Syphon.....	599.82
Dredge Operating.....	6,589.98
Drop Weir D. F. Canal....	590.85
Expense S. F. Office.....	971.24
Labor	12,078.04
Legal Expenses.....	19,245.49
Remodeling Gates...	13,813.58
1882 Rent	200.50
Rent S. F. Office....	320.00
Repairs to Headworks.....	36.22
Salaries	6,838.94
Taxes	6,927.23
Water Rate Contest.....	6.75
Weir on Main Canal.....	1,771.10

\$87,533.98 \$87,527.23

1906:

Canal Cleaning.....	\$13,747.14
Samage Claims.....	631.34
Drain Syphon.....	366.38
Dredge Operating.....	6,673.27
General Expense.....	1,878.35
Expense S. F. Office.....	998.02
Rent S. F. Office.....	320.00
Horses and Feed.....	3,858.73
Household Furniture.....	319.68
Labor	13,242.81
Legal Expenses.....	21,144.90
Lumber and Piles.....	1,704.55
Repairs to Headworks.....	764.59
Salaries	6,385.00
Subsistence	5,378.63

Taxes	8,085.69		
Telephone Inst. and Exp...	311.55		
Vehicles and Harness.....	386.39		
Measuring Boxes.....	240.48		
Water Rate Contest.....	1,232.25		
		\$87,669.75	\$86,437.50
		<hr/>	<hr/>
		\$526,591.53	\$504,979.86

1883

DEFTS' EXHIBIT P.

Statement of Cases in which The San Joaquin & Kings River Canal and Irrigation Company, Incorporated, is Interested.

1. Miller & Lux and The San Joaquin & Kings River Canal & Irrigation Company v. Enterprise Canal & Land Company, Jefferson C. James, et al.:

This action was brought in the Superior Court of Fresno County by the Canal Company and Miller & Lux to enjoin the Enterprise Canal & Land Company from taking out water from the San Joaquin River above the head of The San Joaquin & Kings River Canal & Irrigation Company's canal to be conveyed through the so-called Enterprise Canal on to land belonging to Jefferson G. James situated on Fresno Slough. The case was tried and a judgment entered in favor of Miller & Lux enjoining the diversion, but refusing any relief to the Canal Company, on the ground that the dam maintained by the San Joaquin & Kings River Canal & Irrigation Company was a public nuisance.

The judgment in favor of Miller & Lux was affirmed by the Supreme Court. (See Miller & Lux v. Enterprise Canal & Land Co., 145 Cal. 652.)

From the judgment against the Canal Company an appeal was taken, and that part of the judgment was reversed and the trial court was directed to enter a judgment in favor of the Canal Company and against the defendants. (See Miller & Lux v. Enterprise Canal & Land Co., 142 Cal. 208.)

A new trial however was subsequently granted to the defendants and an appeal was taken from the order granting a new trial, 1884 and this order was affirmed on appeal. (See Miller & Lux v. Enterprise Canal & Land Co., 145 Cal. 652.) Nothing further has been done in the case since that time.

2. The San Joaquin & Kings River Canal & Irrigation Company vs. Fresno Flume & Irrigation Company:

This was an action brought in the Superior Court of Madera County to enjoin the Fresno Flume & Irrigation Company from diverting water from one of the upper tributaries of the San Joaquin River. A like suit was brought by Miller & Lux, and the two cases tried together, and in both of them judgments were rendered in favor of the defendant. An appeal has been taken on both of these cases, and is now pending in the Supreme Court.

3. California Pastoral & Agricultural Co. v. Miller & Lux & The San Joaquin & Kings River Canal & Irrigation Company.

This suit was brought by the California Pastoral & Agricultural Company in the United States Circuit Court of the Southern District of California, Northern Division, to enjoin the Canal Company from diverting part of the water to which it was entitled through the Columbia Canal on the east side of the San Joaquin River. The Canal Company and Miller & Lux both answered, and Miller & Lux also filed a cross-complaint against the California Pastoral & Agricultural Co. for the purpose of having the contracts between the parties construed, so as to permit Miller & Lux to divert *its* share of the water in what is known as the Chowchilla Canal from any point therein at which it may desire to divert the same.

1885 The case was tried and resulted in a judgment in favor of the defendants Miller & Lux and the Canal Company, so far as the relief asked by the complainant was concerned, but denying Miller & Lux the relief asked by the cross complaint. No appeal was taken by the complainant from the part of the judgment in favor of the Canal Company, and therefore from that time on the Canal Company has had no further interest in the case, except for the purpose of having the judgment modified in regard to the costs. Miller & Lux, however, did take an appeal from the part of the judgment which was adverse to it to the United States Circuit Court of Appeals, and that court reversed the part of the judgment which was against Miller & Lux, and directed that a judgment be entered in favor of Miller & Lux on the cross complaint, and also directed the court to make a proper order in regard to costs.

The costs of the case in the lower court were divided equally between Miller & Lux and the Canal Company, and the costs on the appeal were inadvertently charged in the same manner, but when it was discovered that this *has* been done and that the Canal Company only had a small interest in the appeal, Miller & Lux paid the entire cost of the appeal.

4. Miller & Lux & The S. J. & K. R. C. & I. Co. vs. Borland:

This suit was brought in Fresno County to prevent the Borland from pumping water from the San Joaquin River backed into Fresno Slough. The case was tried and judgment entered in favor

of the Borlands and against the plaintiffs, and in order to

1886 avoid the effect of this judgment Mr. Miller formed the Borland Land Company, purchased the Borland lands, and then entered into an agreement with the Canal Company recognizing its right to divert water from the river, and the canal company contributed \$9,000.— toward the purchase of the land.

5. Turner Estate v. Borland:—

This suit was brought in Merced County by the Turner Estate owning certain riparian lands on the San Joaquin River below the head of the S. J. & K. R. C. & I. Co.'s canal, for the purpose of enjoining the same pumping by the Borlands from Fresno Slough, and was brought by the Turner Estate on behalf of Miller & Lux and the Canal Company and settled in the same manner as the other suit against the Borlands.

6. Turner Estate vs. James and Enterprise Canal & Land Co.:

This suit was brought by the Turner Estate in the Superior Court of Merced county to enjoin James and the Enterprise Canal & Land Company from diverting water from the San Joaquin River above the canal of the S. J. & K. R. C. & I. Co. The Turner Estate based its rights upon the ownership of certain riparian land below that canal. The suit was brought at the request of Miller & Lux and The San Joaquin & Kings River Canal & Irrigation Company and prosecuted entirely by Miller & Lux and the San Joaquin & Kings River Canal & Irrigation Company. A judgment was entered by the Superior Court in favor of the plaintiff enjoining the diversion by the defendants. From this judgment an appeal was taken 1887 to the Supreme Court of the State of California and that judgment has been reversed.

7. Miller & Lux vs. Stevenson:

In the case brought by Stevenson against The San Joaquin & Kings River Canal & Irrigation Company the right of the Canal Company to divert water from the river for use upon riparian lands was not determined, and shortly after that decision Miller & Lux brought an action against Stevenson to determine the relative amount of water which the riparian land of Miller & Lux was entitled to. As the only purpose of this suit was to protect the Canal Company from the attacks of Stevenson, two-thirds of the expense of this litigation was borne by the Canal Company and one-third by Miller & Lux.

8. California Pastoral & Agricultural Co. v. Borland:—

This suit was brought by the California Pastoral & Agricultural Company, the owner of riparian lands on the San Joaquin River above and below the canal of the plaintiff herein to enjoin the Borlands from using water from the San Joaquin River or from Fresno Slough above said canal. The suit was brought in the United States Circuit Court of the Southern District of California, and was brought at the request of Miller & Lux and the Canal Company. A preliminary injunction was issued in the case enjoining the diversion of water from the defendants, and this injunction is still in force.

1888 Turner Estate vs. East Side Canal & Irrigation Co.:—

This suit was brought by the Turner Estate at the request of Miller & Lux and The San Joaquin & Kings River Canal & Irrigation Company in the Superior Court of Merced County against the East Side Canal & Irrigation Company, which is owned by J. J. Stevenson, to determine the amount of water which the defendant was entitled to divert from the San Joaquin River. The canal of the East Side Canal & Irrigation Company is situated below the canal of the complainant herein, and the land of the Turner Estate is situated below the East Side-Canal. This suit was brought at the request of the complainant herein and Miller & Lux and was in the nature of a back-fire suit to counteract the suit brought by Stevenson against the Canal Company. No decision in the case has yet been rendered.

1889

Water Rate Case.

The charges made under this heading are for the case of San Joaquin & Kings River Canal & Irrigation Co. Incorporated v. the counties of Stanislaus, Merced and Fresno, brought in the Superior Court of Fresno County for the purpose of setting aside the Stanislaus rate of 1896 and the Merced and Fresno rates of 1904. A demurrer to the complaint was sustained on the ground that application must first be made to the authorities of Stanislaus County to change the rate and a judgment in favor of the defendants on the same ground was affirmed by the Supreme Court of California.

Endorsed: No. 14554. In U. S. Circuit Court Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts' Exhibit P. E. H. Heacock, Master etc. Filed May 14 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1890

DEFENDANTS' EXHIBIT Q.

Articles of Incorporation of The San Joaquin and Kings River Canal and Irrigation Company, Incorporated.

We, the undersigned, do hereby voluntarily associate ourselves into a corporation under the name and style of "The San Joaquin and Kings River Canal and Irrigation Company, Incorporated," and do hereby agree with each other and do certify and declare as follows:

1. That the name of said corporation shall be "The San Joaquin and Kings River Canal and Irrigation Company, Incorporated";

2. That its principal office or place of business is to be located at 116 N. Carson Street, Carson City, Ormsby County, State of Nevada; and the resident agent therein and in charge thereof is the State Agent and Transfer Syndicate, Incorporated; but an office may be maintained at number 508 California Street, in the City and County of San Francisco, State of California, or at such other place or places as may be named by its Board of Trustees, or as may be fixed by the by-laws of said corporation;

3. That the object and purpose for which said corporation is formed, and the nature of the business to be transacted by it, are as follows: The construction of canals in the State of California, leading from the San Joaquin River and King's River, and their tributaries; also from Tulare Lake and streams flowing thereunto, and other waters, for the transportation of passengers and freights, and for the purpose of irrigation and water power, and for the conveyance of water for mining and manufacturing purposes. Also, the supplying of cities and towns in the State of California and

1891 the inhabitants of such cities and towns with pure and fresh water. Also the buying and selling of real estate;

4. That the amount of the capital stock of said corporation shall be One Million Dollars (\$1,000,000), divided into One Hundred Thousand (100,000) shares of the par value of Ten Dollars (\$10) each; and that the amount of its subscribed capital stock, with which it will commence business, is the sum of Seventy Dollars (\$70), all of which has been actually subscribed and actually paid up;

5. That the names of each of the original subscribers to the capital stock of said corporation, and the amount subscribed by each, are as follows:

Henry Miller	one share.....	\$10.00
Thomas B. Bishop.....	one share.....	\$10.00
J. Leroy Nickel.....	one share.....	\$10.00
Edward T. Allen.....	one share.....	\$10.00
Louis F. Monteagle.....	one share.....	\$10.00
W. H. Talbot.....	one share.....	\$10.00
J. E. Bell.....	one share.....	\$10.00

6. That the period limited for the duration of the existence of said corporation is sixteen (16) years;

7. That the governing board of said corporation shall consist of seven (7) members, who shall be styled directors.

In witness whereof, we, the said incorporators, have hereunto set our hands, this 12th day of June, 1905.

HENRY MILLER.
 THOMAS B. BISHOP.
 J. LEROY NICKEL.
 EDWARD T. ALLEN.
 LOUIS F. MONTEAGLE.
 W. H. TALBOT.
 J. E. BELL.

1892 STATE OF CALIFORNIA.

City and County of San Francisco, ss:

On this twelfth day of June, in the year one thousand nine hundred and five, before me, George T. Knox, a Commissioner of Deeds, appointed by the government of the State of Nevada for the State of California, residing in said City and County, and duly commissioned and sworn, personally appeared Henry Miller, Thomas B. Bishop, J. Leroy Nickel, Edward T. Allen, Louis F. Monteagle, W. H. Talbot, and J. E. Bell, known to me to be the persons described in, whose names are subscribed to and who executed the within instrument, and who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

In witness whereof, I have hereunto set my hand and affixed my official seal, at my office, in the said City and County of San Francisco, the day and year in this certificate first above written.

[SEAL.]

GEORGE T. KNOX,
Commissioner of Deeds for the State of Nevada.

STATE OF NEVADA,
County of Ormsby, ss:

I, H. B. Van Etten, County Clerk of Ormsby County, State of Nevada, and ex-officio Clerk of the District Court, in and for the county of Ormsby, do hereby certify that the foregoing is a full, true and correct copy of the original articles of incorporation of "The San Joaquin and Kings River Canal and Irrigation Company, Incorporated," which now remains on file and of record in my 1893 office in Carson City, in said county.

In testimony whereof, I have hereunto set my hand and affixed my Official Seal, at Carson City, in said County and State this 13 day of June A. D. 1905.

[SEAL.]

H. B. VAN ETTEN, *Clerk.*

STATE OF NEVADA,
Department of State, ss:

I, W. G. Douglass, the duly elected, qualified and acting Secretary of State of the State of Nevada, do hereby certify that the foregoing is a true, full and correct copy of the original certified copy of Articles of Incorporation of The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, now on file and of record in this office.

In witness whereof, I have hereunto set my hand and affixed the Great Seal of State, at my office, in Carson City, Nevada, this 13th day of June, A. D. 1905.

[SEAL.]

W. G. DOUGLASS,

Secretary of State.

By J. W. LEGATE, *Deputy.*

(Endorsed:) Articles of Incorporation of The San Joaquin and Kings River Canal and Irrigation Company, Incorporated. Filed Jun- 13 1905. H. B. Van Etten, Clerk. Filed Jun- 13 1905. W. G. Douglass, Secretary of State. By J. W. Legate, Deputy. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts' Exhibit Q. B. H. H., Master, etc. Filed May 14, 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1894

DEFENDANTS' EXHIBIT Q-a.

Be it resolved by the Board of Directors of The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, a corporation under the laws of the State of Nevada, that in the articles of incorporation of said corporation an error exists, to wit: The said articles of incorporation state, in paragraph 5 thereof, that the amount subscribed by each of the original subscribers to the capital stock of said corporation is one share of the par value of \$10.00 each, and in paragraph 4 thereof that the amount of the subscribed capital stock of said corporation with which it will commence business

is the sum of \$70.00; whereas in fact each of said original subscribers subscribed for twenty shares of said capital stock of the par value of \$10.00 each, and the amount of said subscribed capital stock with which said corporation will commence business is the sum of \$1,400.00; and this corporation therefore desires to correct said error.

Therefore to correct said error it is hereby resolved that paragraph 4 and 5 of said articles of incorporation be amended so as to read as follows:

"4. That the amount of the capital stock of said corporation shall be One Million Dollars (\$1,000,000), divided into One Hundred Thousand (100,000) shares of the par value of Ten Dollars (\$10) each; and that the amount of its subscribed capital stock, with which it will commence business, is the sum of Fourteen Hundred Dollars (\$1,400), all of which has been actually subscribed and actually paid up;

"5. That the names of each of the original subscribers to the capital stock of said corporation, and the amount subscribed by each, are as follows:

1895 Henry Miller	twenty shares	\$200.00
Thomas B. Bisohp	twenty shares	\$200.00
J. Leroy Nickel	twenty shares	\$200.00
Edward T. Allen	twenty shares	\$200.00
Louis F. Monteagle	twenty shares	\$200.00
W. H. Talbot	twenty shares	\$200.00
J. E. Bell	twenty shares	\$200.00

We, the undersigned, the president and secretary of The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, a corporation under the laws of the State of Nevada, do hereby certify that the foregoing resolutions were duly adopted by the Board of Directors of said corporation at a meeting of said Board duly and regularly had on the 14th day of June, 1905.

[SEAL.]

HENRY MILLER, *President*,
C. Z. MERRITT, *Secretary*.

We, the undersigned, being all of the incorporators of the above named corporation, and being all of the stockholders of said corporation, have assented and do hereby assent to the foregoing resolutions of the Board of Directors of said corporation, and to the amendments therein contained of the articles of incorporation of said corporation.
June 14, 1905.

HENRY MILLER.
THOMAS B. BISHOP.
J. LEROY NICKEL.
EDWARD T. ALLEN.
LOUIS F. MONTEAGLE.
W. H. TALBOT.
J. E. BELL.

1896 STATE OF CALIFORNIA,
City and County of San Francisco:

I, Geo. T. Knox, a Commissioner of Deeds for the State of Nevada in the State of California, residing at the City and County of San Francisco, duly commissioned and qualified, do hereby certify that on the 14 day of June, in the year of our Lord one thousand nine hundred and five before me personally appeared Henry Miller and C. Z. Merritt, President and Secretary respectively of The San Joaquin & Kings River Canal & Irrigation Company Incorporated known to me to be the individuals described in, whose names are subscribed to and who executed the annexed instrument, and they acknowledged to me that they executed the same as their act and deed, freely and voluntarily, and for the uses and purposes therein mentioned, as President and Secretary as aforesaid.

In witness whereof, I have hereunto set my hand and affixed my official seal at my office in said City and County of San Francisco, the day and year last above written.

[SEAL.]

GEO. T. KNOX,
*Commissioner of Deeds for State of Nevada
in California at San Francisco.*

STATE OF CALIFORNIA,
City and County of San Francisco:

I, Geo. T. Knox, a Commissioner of Deeds for the State of Nevada in the State of California, residing at the City and County of San Francisco, duly commissioned and qualified, do hereby certify that on the fourteenth day of June, in the year of our Lord one thousand nine hundred and five before me personally appeared Henry Miller, Thomas B. Bishop, J. Leroy Nickel, Edward T. Allen, Louis F. Monteagle, W. H. Talbot & J. E. Bell, known to me to be the individuals described in, whose names are subscribed to and who
1897 executed the annexed instrument, and they acknowledged to me that they executed the same as their act and deed, freely and voluntarily, and for the uses and purposes therein mentioned.

In witness whereof, I have hereunto set my hand and affixed my official seal at my office in said City and County of San Francisco, the day and year last above written.

[SEAL.]

GEO. T. KNOX,
*Commissioner of Deeds for State of Nevada
in California at San Francisco.*

STATE OF NEVADA,
Department of State, ss:

I, W. G. Douglass, the duly elected, qualified and acting Secretary of State of the State of Nevada, do hereby certify that the foregoing is a true, full and correct copy of the original Amended Articles of Incorporation of The San Joaquin and Kings River Canal and Irrigation Company Incorporated now on file and of record in this office.

In witness whereof, I have hereunto set my hand and affixed the Great Seal of State, at my office, in Carson City, Nevada, this 16 day of June A. D. 1905.

[SEAL.]

W. G. DOUGLASS,
Secretary of State.
By J. W. LEGATE, *Deputy.*

(Endorsed:) Certificate of Amendment of Articles of Incorporation of The San Joaquin and Kings River Canal and Irrigation Company, Incorporated. Filed Jun- 16 1905. W. G. Douglass, Secretary of State, By J. W. Legate, Deputy. No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts' Exhibit Q-a. E. H. H., Master, etc. Filed May 14 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1898 No. 14554. In U. S. Circuit Court, Northern District of California. The San Joaquin and K. R. C. & I. Co. vs. The County of Stanislaus, et al. Def'ts' Exhibit R. E. H. H., Master, etc. Report of H. H. Henderson Hydraulic Engineer as to Value of Earth Work and Structures of the San Joaquin & K. R. C. & I. Co.'s Canals. Filed May 14 1910. Southard Hoffman, Clerk, By J. A. Schaertzer, Deputy Clerk.

1899 *Estimate of Value of the San Joaquin & Kings River Canal & Irrigation Company's Canal, Fresno County, California.*

Total present value of structures.....	\$53,850.50
Total present value of earthwork.....	88,395.40
Engineering & supervision 10%.....	17,084.00
Contingencies 10%	17,084.00
Total value	<u>\$176,413.90</u>

Estimate of Total Value.

Total value of Fresno County.....	\$176,413.90
Total value of Merced County.....	218,174.20
Total value of Stanislaus County	<u>20,818.30</u>
Estimate of total value.....	\$415,405.40

1900 Excavation, China Slough, Fresno County.

Sta. 0+00-78+00. 8268 Cu. yds. @ .07@..... \$578.76

Spillways.

No. 1 Length 4,381 ft. 15,333 yds. @ .07¢.....	1,073.30
No. 2 Length 5,865 ft. 18,890 yds. @ .07¢.....	1,322.30
No. 3 Length 5,732 ft. 18,056 yds. @ .07¢.....	<u>1,263.90</u>
	\$3,659.50

Gates in Spillway No. 1.

Sta. 24-30.

Gates in Spillway No. 2.

Gates in Spillway No. 3.

Width 16 feet. Depth 72 Inches. Length 24 feet. Dep. 20%.

Lumber 6984 ft. cost 380.70 Dep. 20% \$76.20

5 gates @ 380.70..... \$1,903.50 \$381.00

Earthwork.

Main Canal, Fresno, County.

Sta.	0-00-	46-00	end of cut	8,869	yards
Sta.	46-00-	100-00	along slough		
			dredger	28,155	"
			old bank	20,936	"
Sta.	46-00-	188-40	.....	38,604	"
				<hr/>	
Sta.	188-40-	275-39	.....	96,564	
Sta.	275-39-	287-57	.....	54,820	"
Sta.	287-57-	310-00	.....	9,501	"
Sta.	310-00-	329-19	.....	21,886	"
Sta.	329-19-	352-00	.....	26,298	"
Sta.	352-00-	410-00	.....	14,526	"
Sta.	410-00-	451-63	.....	21,982	"
Sta.	451-63-	501-05	.....	18,884	"
Sta.	501-05-	529-71	.....	27,126	"
				<hr/>	
1900 1/2					
Sta.	529-71-	578-48	.....	29,730	yds.
Sta.	578-48-	610-00	.....	23,463	"
Sta.	610-00-	630-00	.....	16,901	"
Sta.	630-00-	659-71	.....	20,192	"
Sta.	659-71-	700-00	.....	27,535	"
Sta.	700-00-	730-00	.....	11,097	"
Sta.	730-00-	751-82	.....	14,592	"
Sta.	751-82-	810-00	.....	40,831	"
Sta.	810-00-	889-95	.....	49,308	"
Sta.	889-95-	960-05	.....	54,478	"
Sta.	960-05-	1047-27	.....	54,006	"
Sta.	1047-27-	119-47	.....	45,332	"
Sta.	1119-47-	1126-00	.....	4,097	"
				<hr/>	

Total in Main Canal Fresno Co..... 701,031 yds.

701,031 yds. @ .05¢..... \$35,051.55

Outside Canal, Fresno County.

Sta.	0-00- 160-00	116,090 yards
Sta.	160-00- 340-00	118,674 "
Sta.	340-00- 460-00	74,520 "
Sta.	460-00- 700-00	152,088 "
Sta.	700-00- 853-18	97,300 "
Sta.	853-18-1002-00	69,261 "

Total in outside canal, Fresno County..... 625,933 "

625,933 yards @ .05¢..... \$31,296.70

Dos Palos Canal, Fresno County.

Sta.	0-00- 102-50	37,207 yards
Sta.	102-50- 257-00	54,832 "
Sta.	257-00- 469-50	88,804 "

Total in Dos Palos Canal, Fresno Co..... 180,843 "

180,843 yds. @ .07¢..... \$12,659.00

Sideditch Outside Canal, Fresno County.

Sta.	0-00- 160-00	12,246 yards
1901		
Sta.	160-00- 340-00	8,000 yards
Sta.	340-00- 460-00	11,555 "
Sta.	460-00- 700-00	22,260 "
Sta.	700-00- 853-18	10,022 "
Sta.	853-18-1002-00	9,287 "

Total in sideditch, Fresno County..... 73,570 yards

73,570 yards @ .07¢..... 5,149.90

Telephone Lines, Fresno County.

213 miles @ \$115.00 per mile..... \$24,49.50 Dep. 30%

½ charged to Miller & Lux..... 1,224.75

½ charged to the Canal Company..... 1,224.75 \$367.20

1902

Head Works.

Lumber 559400" ft. @	\$25.00 per M	\$13,985.00	Depreciation 30%
Carpenter Work .. @	5.00 " "	2,797.00	
Hauling @	3.00 " "	1,777.00	
Iron @	2.00 " "	1,118.00	
Nails @	.30 " "	167.00	
Pile Driving 568.. @	1.50	842.00	
" Sheet piling 1,398 @	1.00	1,398.00	

Special draw Estimated	1,200.00
Fish ladder's "	350.00
Blacksmithing "	500.00
Pumping "	750.00
Earthwork & Levee	3,000.00
Engineering & Supervision 10%	3,000.00
Interest & Depreciation on Tools	500.00
Contingencies 10%	3,000.00

\$34,384.00

\$10,315.20

River Boom.

Lumber 400 ft., round @ \$.20 per ft	80.00
" 4,296 " @ 25.00 per M	106.90
Carpenter Work @ 7.00 " "	30.00
Hauling @ 3.00 " "	12.90
Chain 200 ft. 1/2"	35.00
Bolts	5.00

\$269.80

80.90

Spillway.

Lumber 11,704 @ \$25.00 per M	\$292.60
Carpenter Work @ 7.00 " "	81.90
Hauling @ 3.00 " "	35.10
Iron @ 2.00 " "	23.40
Nails @ .30 " "	3.50
Earth Work	120.00

\$556.50

60%

\$337.90

1903

Bulkhead.

Lumber 3,208 ft. ... @ \$25.00 per M	\$80.25
Piles 37,740 ft. @ .20 " "	148.00
Pile Driving 37 @ 1.50 " "	55.50
Carpenter Work @ 7.50 " "	22.40
Hauling @ 3.00 " "	9.60
Iron @ 2.00 " "	6.40
Nails @ .30 " "	1.00
Earth Work	25.00

\$348.10

313.30

Protection Wings.

Lumber 1,720 ft. @ .20	\$344.00
Pile driving 92 @ 1.50	138.00
Lumber 1,904 ft. @ 25.00 per M	272.60
Carpenter Work @ 7.00 " "	76.30
Hauling @ 3.00 " "	32.70
Iron @ 2.00 " "	21.80
Nails @ .30 " "	3.30
Earth Work	25.00

\$913.70

90%

\$822.33

Headgate.

Sta. 0. Width 26 ft. Depth 11 ft. 4". Length 48 ft. 60%

Lumber 16,500 ft.	@	\$25.00	per M.	\$412.50
Carpenter Work	@	7.00	" "	115.50
Hauling	@	3.00	" "	49.50
Iron	@	2.00	" "	33.00
Nails	@	.30	" "	4.00
Earth Work				120.00

\$734.50

\$661.06

1904

Main Canal Fresno County.

Headgate.

Sta. 0-30. Width 30 ft. Depth 12 ft. Length 50. Depreciation.
10%

Lumber 18,500 ft.	@	\$25.00	per M	\$462.50
Carpenter Work	@	7.00	" "	129.50
Hauling	@	3.00	" "	55.50
Iron	@	2.00	" "	37.00
Nails	@	.30	" "	5.50
Earth Work				120.00

\$810.00

\$81.00

Sidegate.

Sta. 47-87. Width 20 ft. Depth 10 ft. Length 24 ft. 60%

Lumber 5,386 ft.	@	\$25.00	per M	\$134.60
Carpenter Work	@	7.00	" "	37.80
Hauling	@	3.00	" "	16.20
Iron	@	2.00	" "	10.80
Nails	@	.30	" "	1.60
Earth Work				25.00

\$226.00

\$135.60

Sidegate.

Sta. —. Width 6 ft. Depth 5 ft. Length 20 ft. 60%

Lumber 15,888	@	\$25.00	per M	\$59.70
Carpenter Work	@	7.00	" "	11.20
Hauling	@	3.00	" "	4.80
Iron	@	2.00	" "	3.20
Nails	@	.30	" "	.50
Earth Work				25.00

\$104.40

\$62.60

1905

Sidegate.

Sta. 74-64. Width 20 ft. Depth 9 ft. Length 24 ft. 60%

Lumber 7,617 ft.@	\$25.00	per M	\$190.40	
Carpenter Work@	7.00	" "	47.60	
Hauling@	3.00	" "	20.40	Obsolete
Iron@	2.00	" "	13.60	
Nails@	.30	" "	2.00	
Earth Work			25.00	
			<hr/>	
			\$199.00	\$119.40

Sidegate.

Sta. ———. Width 8 ft. Depth 54". Length 20 ft. 50%				
Lumber 1,756 ft.@	\$25.00	per M	\$43.90	
Carpenter Work@	7.00	" "	12.60	
Hauling@	3.00	" "	5.40	Obsolete
Iron@	2.00	" "	3.60	
Nails@	.30	" "	.60	
Earth Work			25.00	
			<hr/>	
			\$91.10	\$45.50

Sidegate.

Sta. ———. Width 8 ft. Depth 54". Length 20 ft. 60%				
Lumber 1,968 ft.@	\$25.00	per M	\$49.20	
Carpenter Work@	7.00	" "	14.00	
auling@	3.00	" "	6.00	Obsolete
Iron@	2.00	" "	4.00	
Nails@	.30	" "	.60	
Earth Work			25.00	
			<hr/>	
			\$98.80	\$59.30

1906

Bridge.

Sta. 133-70. Width 16 ft. Length 112 ft. 50%

Lumber 12,452@	\$25.00	per M	\$311.40	
Carpenter Work@	7.00	" "	87.50	
Hauling@	3.00	" "	37.50	
Iron@	2.00	" "	25.00	
Nails@	.30	" "	3.70	
Earth Work			25.00	
			<hr/>	
			\$490.10	\$245.00

Weir.

Sta. 133-70. Width 24 ft. Depth 12 ft. Length 80 ft. 30%

Lumber 41,072 ft. . . @	\$25.00	per M	\$1,026.80
Carpenter Work . . @	7.00	" "	287.00
Hauling @	3.00	" "	123.00
Iron @	2.00	" "	82.00
Nails @	.30	" "	12.30
Earth Work			120.00

\$1651.10

\$395.30

Weir.

Sta. 176-60. Helm Canal

Bridge.

Sta. 252-73. Width 18 ft. Length 88 ft..

Lumber 11,465 ft. . . @	\$25.00	per M.	\$286.30
Carpenter Work . . . @	7.00	" "	80.50
Hauling @	3.00	" "	34.50
Iron @	2.00	" "	23.00
Nails @	.30	" "	3.50
Earth Work			25.00

\$452.80

\$45.30

1907

Sidegate.

Sta. 253-40. Width 14 ft. Depth 78 ft. Length 18 ft. 40%

Lumber 2,596 ft. . . . @	\$25.00	per M	\$64.90
Carpenter Work @	7.00	" "	18.20
Hauling @	3.00	" "	7.80
Iron @	2.00	" "	5.20
Nails @	.30	" "	.80
Earth Work			25.00

Obsolete

\$121.90

\$48.76

Spillway.

Sta. 326-50. Width 26 ft. Depth 10 ft. 6". Length 48 ft. 50%.

Lumber 18,500 ft. . . @	\$25.00	per M.	\$462.50
Carpenter Work @	7.00	" "	129.50
Hauling @	3.00	" "	55.50
Iron @	2.00	" "	37.00
Nails @	.30	" "	5.60
Earth Work			120.00

\$809.50

\$404.70

Sidegate.

Sta. 330-. 14" Salt Glazed Pipe & Wooden Gate.

Estimated cost \$75.

Sidegate.

Sta. 330-72. Width 24 ft. Depth 10 ft. Length 20 ft. 70%.

Lumber 6,745 Ft. . . .	@	\$25.00	per	M.	\$168.60	
Carpenter Work	@	7.00	"	"	46.90	
Hauling	@	3.00	"	"	20.10	
Iron	@	2.00	"	"	13.40	
Nails	@	.30	"	"	2.00	
Earth Work					25.00	
						<hr/>
						\$276.00
						\$193.20

1908

Bridge.

Sta. 330-72. Width 16 ft. Length 24 ft. 60%

Lumber 2,328 ft. . . .	@	\$25.00	per	M.	\$58.20	
Carpenter Work	@	7.00	"	"	16.10	
Hauling	@	3.00	"	"	6.90	
Iron	@	2.00	"	"	4.60	
Nails	@	.30	"	"	.70	
Earth Work					25.00	
						<hr/>
						\$111.50
						\$66.90

Weir.

Sta. 334-53. Width 26 ft. Depth 11 ft. 8". Length 50 ft. 20%.

Lumber 18,500 ft. . . .	@	\$25.00	per	M.	\$462.50	
Carpenter Work	@	7.00	"	"	129.50	
Hauling	@	3.00	"	"	55.50	
Iron	@	2.00	"	"	37.00	
Nails	@	.30	"	"	5.60	
Earth Work					120.00	
						<hr/>
						\$810.10
						\$162.00

Bridge.

Sta. 357-98. Width 16 ft. Length 76 ft. 30%

Lumber 7,654 ft. . . .	@	\$25.00	per	M.	\$191.30	
Carpenter Work	@	7.00	"	"	53.20	
Hauling	@	3.00	"	"	23.00	
Iron	@	2.00	"	"	15.20	
Nails	@	.30	"	"	3.30	
Earth Work					25.00	
						<hr/>
						\$309.80
						\$92.90

1909

Bridge.

Sta. 372-38. Width 16 ft. Length 62 ft. 100%.

Lumber 6,686 ft.	@	\$25.00	per M.	\$167.20
Carpenter Work	@	7.00	" "	46.90
Hauling	@	3.00	" "	20.10
Iron	@	2.00	" "	13.40
Nails	@	.30	" "	2.00
Earth Work				25.00

\$274.60

\$274.60

Sidegate.

Sta. 383-17. Width —.
Obsolete.

Bridge & Gate.

Sta. 490-00. Of no value. 100%.

Sidegate.

Sta. 500-54. Width 60". Depth 48". Length 24 ft. 30%.

Lumber 1,263 ft.	@	\$25.00	per M	\$31.60
Carpenter Work	@	7.00	" "	9.10
Hauling	@	3.00	" "	3.90
Iron	@	2.00	" "	2.60
Nails	@	.30	" "	.40
Earth Work				25.00

\$72.60

\$21.80

1910

Sidegate.

Sta. 550-17. Width 10 ft. 6". Depth 5 ft. Length 24 ft. 30%.

Lumber 2,728 ft.	@	\$25.00	per M.	\$68.20
Carpenter Work	@	7.00	" "	18.90
Hauling	@	3.00	" "	8.10
Iron	@	2.00	" "	5.40
Nails	@	.30	" "	.80
Earth Work				25.00

\$126.40

\$37.92

Bridge.

Sta. 572-57. Width 16 ft. Length 62 ft. 40%

Lumber 6,216 ft.	@	\$25.00	per M.	\$155.40
Carpenter Work	@	7.00	" "	43.40
Hauling	@	3.00	" "	18.60
Iron	@	2.00	" "	12.40
Nails	@	.30	" "	1.90
Earth Work				25.00

\$256.70

\$102.70

Outside Canal Spillway.

Sta. 577-30.

Sidegate.

Sta. 579-37. Width 11 ft. 6". Depth 5 ft. Length 40 ft. 30%.

Lumber 3,524 ft.	@	25.00	per M	\$98.10
Carpenter Work	@	7.00	" "	27.30
Hauling	@	3.00	" "	11.70
Iron	@	2.00	" "	7.80
Nails	@	.30	" "	1.20
Earth Work				25.00

\$171.10

\$51.30

1911

Weir.

Sta. 579-88. Width 20 ft. Depth 8 ft. Length 40 ft. 80%.

Lumber 12,914 ft. ...	@	\$25.00	per M	\$322.80
Carpenter Work	@	7.00	" "	90.30
Hauling	@	3.00	" "	38.70
Iron	@	2.00	" "	25.80
Nails	@	.30	" "	3.90
Earth Work				120.00

\$601.50

\$481.20

Weir.

Sta. 579-81. Width 24 ft. Depth 9 ft. Length 40 ft. 80%.

Lumber 13,870 ft. ..	@	\$25.00	per M	\$346.70
Carpenter Work	@	7.00	" "	97.30
Hauling	@	3.00	" "	41.70
Iron	@	2.00	" "	27.80
Nails	@	.30	" "	4.10
Earth Work				120.00

\$637.60

\$510.00

Sidegate.

Sta. 593-76. Width 7 ft. Depth 78". Length 28 ft. 40%.

Lumber 2,508 ft. ...	@	\$25.00	per M.	\$62.70
Carpenter Work	@	7.00	" "	17.50
Hauling	@	3.00	" "	7.50
Iron	@	2.00	" "	5.00
Nails	@	.30	" "	.80
Earth Work				25.00

\$118.50

\$47.00

1912

Sidegate.

Sta. 616+75. Width 8 ft. Depth 74". Length 36 ft. 30%.

Lumber 3,563 ft. @ \$25.00 per M.	\$97.30	
Carpenter Work @ 7.00 " "	27.30	
Hauling @ 3.00 " "	11.70	
Iron @ 2.00 " "	7.80	
Nails @ .30 " "	1.20	
Earth Work	25.00	
	<hr/>	
	\$170.30	\$51.00

Sidegate.

Sta. 637+36. Width 6 ft. Depth 66". Length 35 ft. 30%.

Lumber 2,221 ft. @ \$25.00 per M.	\$55.50	
Carpenter Work @ 7.00 " "	15.40	
Hauling @ 3.00 " "	6.60	
Iron @ 2.00 " "	4.40	
Nails @ .30 " " .....	.70	
Earth Work	25.00	
	<hr/>	
	\$107.60	\$32.35

Sidegate.

Sta. 666+30. Width 84". Depth 66". Length 33 ft. 30%.

Lumber 2,607 Ft @ \$25.00 per M.	\$65.20	
Carpenter Work @ 7.00 " "	18.20	
Hauling @ 3.00 " "	7.80	
Iron @ 2.00 " "	5.20	
Nails @ .30 " " .....	.80	
Earth Work	25.00	
	<hr/>	
	\$122.20	\$36.60

1913

Bridge & Weir.

Sta. 679+90. Width 14 ft. Depth 8 ft. Length 30 ft. 80%.

Lumber 5,046 ft @ \$25.00 per M.	\$139.60	
Carpenter Work @ 7.00 " "	35.00	
Hauling @ 3.00 " "	15.00	
Iron @ 2.00 " "	10.00	
Nails @ .30 " "	1.50	
Earth Work	25.00	
	<hr/>	
	\$236.10	\$188.90

Weir.

Sta. 679+90. Width 18 ft. Depth 9 ft. 6". Length 30 ft. 40%.

Lumber 12,500 ft @ \$25.00 per M.....	\$312.50	
Carpenter Work @ 7.00 " "	87.50	
Hauling @ 3.00 " "	37.50	
Iron @ 2.00 " "	25.00	
Nails @ .30 " "	3.80	
Earth Work	120.00	
	<u>\$586.30</u>	\$234.50

Sidegate.

Sta. +39. Width 6 ft. Depth 4 ft. Length 32 ft. 30%.

Lumber 1,890 ft. @ \$25.00 per M.....	\$45.20	
Carpenter Work @ 7.00 " "	12.60	
Hauling @ 3.00 " "	5.40	
Iron @ 2.00 " "	3.60	
Nails @ .30 " " .....	.60	
Earth Work	25.00	
	<u>\$92.40</u>	\$27.70

1914

Sidegate.

Sta. 722+02. Width 6 ft. Depth 66". Length 30 ft. 30%.

Lumber 2,271 ft @ \$25.00 per M.....	\$56.70	
Carpenter Work @ 7.00 " "	16.10	
Hauling @ 3.00 " "	6.90	
Iron @ 2.00 " "	4.60	
Nails @ .30 " " .....	.70	
Earth Work	25.00	
	<u>\$110.00</u>	\$33.00

Sidegate.

Sta. 734+77. Width 5 ft. Depth 6 ft. Length 28 ft. 30%.

Lumber 2,092 ft. @ \$25.00 per M.....	\$52.30	
Carpenter Work @ 7.00 " "	14.70	
Hauling @ 3.00 " "	6.30	
Iron @ 2.00 " "	4.20	
Nails @ .30 " " .....	.70	
Earth Work	25.00	
	<u>\$103.20</u>	\$30.30

Sidegate.

Sta. 749+51. Width 6 ft. Depth 58". Length 30 ft. 30%.

Lumber 2,044 ft. @	\$25.00 per M.	\$51.10
Carpenter Work @	7.00 " "	14.70
Hauling @	3.00 " "	6.30
Iron @	2.00 " "	4.20
Nails @	.30 " "	.70
Earth Work		25.00

\$102.00 \$30.60

1915 Gate.

Sta. 750- In Center of Bank. Obsolete. 100%

Drain.

Sta. 751-71. Width 5 ft. Depth 4 ft. Length 32 ft. 40%.

Lumber 2,522 ft. @	\$25.00 per M	\$63.10
Carpenter work @	7.00 " "	17.50
Hauling @	3.00 " "	7.50
Iron @	2.00 " "	5.00
Nails @	.30 " "	.80
Earthwork		25.00

\$118.90 \$37.50

Bridge.

Sta. 752-59. Width 14 ft. Length 64 ft. 70%

Lumber 5,732 ft. @	\$25.00 per M	\$143.30
Carpenter work @	7.00 " "	39.90
Hauling @	3.00 " "	17.10
Iron @	2.00 " "	11.40
Nails @	.30 " "	1.70
Earthwork		25.00

\$237.40 \$166.20

Bridge & Weir.

Sta. 752-59. Width 22 ft. Length 40 ft. Depth 8 ft. 90%

Lumber 15,930 ft. @	\$25.00 per M	\$398.20
Carpenter Work @	7.00 " "	111.30
Hauling @	3.00 " "	47.70
Iron @	2.00 " "	31.80
Nails @	.30 " "	4.80
Earth Work		120.00

\$713.80 \$642.40

1916

Drain.

Sta. 756-61. Width 10 ft. Depth 4 ft. Length 12 ft. 50%

Lumber 1,029 ft.@	\$25.00	per M	\$25.70	
Carpenter Work@	7.00	" "	7.70	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.30	" "	.40	
Earth Work			25.00	
			<hr/>	
			\$64.30	\$32.10

Sidegate.

Sta. 758-86. Width 68". Depth 6 ft. Length 32 ft. 30%

Lumber 2,242 ft.@	\$25.00	per M	\$56.10	
Carpenter Work@	7.00	" "	16.10	
Hauling@	3.00	" "	6.90	
Iron@	2.00	" "	4.60	
Nails@	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$109.40	\$32.80

Sidegate.

Sta. 772-60. Width 70". Depth 92". Length 33 ft. 30%

Lumber 2,703 ft.@	\$25.00	per M	\$67.50	
Carpenter Work@	7.00	" "	18.90	
Hauling@	3.00	" "	8.10	
Iron@	2.00	" "	5.40	
Nails@	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$125.70	\$37.70

1917

Sidegate.

Sta. 786-70. Width 54". Depth 94". Length 34 ft. 30%

Lumber 2,778 ft.@	\$25.00	per M	\$69.50	
Carpenter Work@	7.00	" "	19.60	
Hauling@	3.00	" "	8.40	
Iron@	2.00	" "	5.60	
Nails@	.30	" "	.90	
Earth Work			25.00	
			<hr/>	
			\$129.00	\$38.70

Gate.

Sta. 799-77. Gate in Center Bank Obsolete. 100%

Sidegate.

Sta. 799-81. Width 6 ft. Depth 6 ft. Length 34 ft. 30%

Lumber 2,256 ft.@	\$25.00	per M	\$63.20	
Carpenter Work@	7.00	" "	17.50	
Hauling@	3.00	" "	7.50	
Iron@	2.00	" "	5.00	
Nails@	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$119.00	\$35.70

Sidegate.

Sta. 826-67. Width 80". Depth 108". Length 34 ft. 40%

Lumber 3,688 ft.@	\$25.00	per M	\$92.20	
Carpenter Work@	7.00	" "	25.90	
Hauling@	3.00	" "	11.10	
Iron@	2.00	" "	7.40	
Nails@	.30	" "	1.10	
Earth Work			25.00	
			<hr/>	
			\$162.70	\$65.00

1918

Sidegate.

Sta. 854-08. Width 6 ft. Depth 5 ft. Length 32 ft. 30%

Lumber 2,112 ft.@	\$25.00	per M	\$53.80	
Carpenter Work@	7.00	" "	14.70	
Hauling@	3.00	" "	6.30	
Iron@	2.00	" "	4.20	
Nails@	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$104.70	\$31.40

Sidegate.

Sta. 867-89. Width 78". Depth 94". Length 30 ft. 30%

Lumber 2,952 ft.@	\$25.00	per M	\$73.80	
Carpenter Work@	7.00	" "	21.00	
Hauling@	3.00	" "	9.00	
Iron@	2.00	" "	6.00	
Nails@	.30	" "	.90	
Earth Work			25.00	
			<hr/>	
			\$135.70	\$40.70

Sidegate.

Sta. 882-17. Width 76". Depth 84". Length 28 ft. 40%

Lumber 2,573@	\$25.00	per M	\$64.30
Carpenter Work ...@	7.00	" "	18.20
Hauling@	3.00	" "	7.80
Iron@	2.00	" "	5.20
Nails@	.30	" "	.80
Earth Work			25.00

\$121.30

\$48.50

1919

Gate.

Sta. 882-68. Gate in Center Bank Obsolete. 100%

Weir.

Sta. 883-68. Width 24 ft. Depth 7 ft. 6". Length 40 ft. 80%

Lumber 12,648 ft...@	\$25.00	per M	\$316.20
Carpenter Work ...@	7.00	" "	88.90
Hauling@	3.00	" "	38.10
Iron@	2.00	" "	25.40
Nails@	.30	" "	3.80
Earth Work			120.00

\$592.40

\$473.90

Weir.

Sta. 883-68. Width 20 ft. Depth 8 ft. 4". Length 50 ft. 90%

Lumber 15,500 ft...@	\$25.00	per M	\$387.50
Carpenter Work ...@	7.00	" "	108.50
Hauling@	3.00	" "	46.50
Iron@	2.00	" "	31.00
Nails@	.30	" "	4.70
Earth Work			120.00

\$698.20

\$628.40

Sidegate.

Sta. 910-47. Width 68". Depth 64". Length 36 ft. 30%

Lumber 2,209 ft...@	\$25.00	per M	\$55.20
Carpenter Work ...@	7.00	" "	15.40
Hauling@	3.00	" "	6.60
Iron@	2.00	" "	4.40
Nails@	.30	" "	.70
Earth Work			25.00

\$107.30

\$32.10

1920

Sidegate.

Sta. 927-24. Width 6 ft. Depth 56". Length 33 ft. 40%

Lumber 1,970 ft....@	\$25.00	per M	\$49.30
Carpenter Work ...@	7.00	" "	14.00
Hauling@	3.00	" "	6.00
Iron@	2.00	" "	4.00
Nails@	.30	" "	.60
Earth Work			25.00

\$98.90

\$36.50

Sidegate.

Sta. 937-21. Width 6 ft. Depth 6 ft. Length 37 ft. 40%

Lumber 2,448 ft....@	\$25.00	per M	\$61.20
Carpenter Work ...@	7.00	" "	17.50
Hauling@	3.00	" "	7.50
Iron@	2.00	" "	5.00
Nails@	.30	" "	.80
Earth Work			25.00

\$117.00

\$46.80

Sidegate.

Sta. 950-51. Width 6 ft. Depth 74". Length 37 ft. 40%

Lumber 2,299 ft....@	\$25.00	per M	\$57.50
Carpenter Work ...@	7.00	" "	16.10
Hauling@	3.00	" "	6.90
Iron@	2.00	" "	4.60
Nails@	.30	" "	.70
Earth Work			25.00

\$110.80

\$44.30

1921

Sidegate.

Sta. 963-48. Width 6 ft. Depth 84". Length 36 ft. 40%

Lumber 2,269 ft....@	\$25.00	per M	\$46.70
Carpenter Work ...@	7.00	" "	16.10
Hauling@	3.00	" "	6.90
Iron@	2.00	" "	4.60
Nails@	.30	" "	.70
Earth Work			25.00

\$100.00

\$40.00

Sidegate.

Sta. 991-41. Width 66". Depth 5 ft. Length 26 ft. 40%

Lumber 1,828 ft. . . @	\$25.00 per M	\$45.70
Carpenter Work . . . @	7.00 " "	12.60
Hauling @	3.00 " "	5.40
Iron @	2.00 " "	3.60
Nails @	.30 " "	.60
Earth Work		25.00

\$92.90

\$37.10

Sidegate.

Sta. 1005-07. Width 6 ft. Depth 4 ft. Length 25 ft. 40%

Lumber 1,551 ft. . . @	\$25.00 per M	\$38.80
Carpenter Work . . . @	7.00 " "	11.20
Hauling @	3.00 " "	4.80
Iron @	2.00 " "	3.20
Nails @	.30 " "	.50
Earth Work		25.00

\$83.50

\$33.40

1922

Bridge.

Sta. 1018-94. Width 18 ft. Length 80 ft. 40%

Lumber 9,887 ft. . . @	\$25.00 per M	\$247.20
Carpenter Work . . . @	7.00 " "	66.30
Hauling @	3.00 " "	29.70
Iron @	2.00 " "	19.80
Nails @	.30 " "	3.00
Earth Work		25.00

\$391.00

\$156.40

Bridge.

Sta. 1018-94. Width 18 ft. Length 64 ft. 40%

Lumber 7,786 ft. . . @	\$25.00 per M	\$194.70
Carpenter Work . . . @	7.00 " "	54.60
Hauling @	3.00 " "	23.40
Iron @	2.00 " "	15.60
Nails @	.30 " "	2.40
Earth Work		25.00

\$315.70

\$126.30

Sidegate.

Sta. 1019-52. Width 66". Depth 4 ft. Length 24 ft. 30%

Lumber, 1,401 ft...@	\$25.00 per M	\$35.00	
Carpenter Work ...@	7.00 " "	9.80	
Hauling@	3.00 " "	4.20	
Iron@	2.00 " "	2.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$77.30	\$23.20

1923 Sidegate.

Sta. 1046-26. Width 66". Depth 4 ft. Length 22 ft. 20"

Lumber 1,393 ft...@	\$25.00 per M	\$34.80	
Carpenter Work ...@	7.00 " "	9.80	
Hauling@	3.00 " "	4.20	
Iron@	2.00 " "	2.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$77.10	\$15.40

Sidegate.

Sta. 1073-08. Width 6 ft. Depth 4 ft. Length 22 ft. 40%

Lumber 1,427 ft...@	\$25.00 per M	\$38.20	
Carpenter Work ...@	7.00 " "	9.80	
Hauling@	3.00 " "	4.20	
Iron@	2.00 " "	2.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$80.50	\$32.20

Gate.

Sta. 1118-21. Gate in Center Bank. Obsolete. 100%

Sidegate.

Sta. 1116-12. Width 4 ft. Depth 3 ft. Length 14 ft. 20%

Lumber 666 ft.....@	\$25.00 per M	\$16.70	
Carpenter Work ...@	7.00 " "	4.90	
Hauling@	3.00 " "	2.10	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$60.60	\$12.10

1374 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1924 Sidegate.

Sta. 1123-09. Width 6 ft. Depth 54". Length 24 ft. 30%

Lumber 1,473 ft. ...@	\$25.00	per M	\$36.80	
Carpenter Work ...@	7.00	" "	10.50	
Hauling@	3.00	" "	4.50	
Iron@	2.00	" "	3.00	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$80.30	\$24.10

Merced-Fresno County Line.

Station 1126.

Total Cost of Structures	\$52,743.70
Total Depreciation "	\$19,850.60
	<hr/>
Present Value	\$32,893.10

1925 Outside Canal, Fresno County.

Sidegate.

Sta. 0-42. Width 10 ft. Depth 68". Length 67 ft. 90%

Lumber 2,867 ft. ...@	\$25.00	per M	\$71.70	
Carpenter Work ...@	7.00	" "	48.30	
Hauling@	3.00	" "	8.70	
Iron@	2.00	" "	5.80	
Nails@	.30	" "	.90	
Earth Work			120.00	
			<hr/>	
			\$255.40	\$229.80

Bridge.

Sta. 0-42. Width 16 ft. Length 93 ft. 20%

Lumber 9,835 ft. ...@	\$25.00	per M	\$245.90	
Carpenter Work ...@	7.00	" "	68.60	
Hauling@	3.00	" "	29.40	
Iron@	2.00	" "	19.60	
Nails@	.30	" "	2.00	
Earth Work			25.00	
			<hr/>	
			\$390.50	\$78.10

Weir.

Sta. 0-78. Width 14 ft. Depth 84". Length 60 ft. 40%

Lumber 16,500 ft. . . @	\$25.00	per M	\$412.50
Carpenter Work . . . @	7.00	" "	115.50
Hauling @	3.00	" "	49.50
Iron @	2.00	" "	33.00
Nails @	.30	" "	5.00
Earth Work			120.00

\$730.50

\$294.20

1926

Gate — Side Ditch.

Sta. — Type A. Width 10 ft. Depth 4 ft. Length 10 ft. 30%

Lumber 760 ft. . . @	25.00	per M	\$19.00
Carpenter Work . . . @	7.00	" "	5.60
Hauling @	3.00	" "	2.40
Iron @	2.00	" "	1.60
Nails @	.30	" "	.50
Earth Work			15.00

\$44.10

\$13.20

Gate in Side Ditch.

Sta. —, Type A. \$44.10 \$13.20

Gate in Side Ditch.

Sta. —, Type A. \$44.10 \$13.20

Gate in Side Ditch.

Sta. —, Type B. Width 10 ft. Depth 5 ft. Length 12 ft. 30%

Lumber 1,228 ft. . . @	\$25.00	per M	\$30.70
Carpenter Work . . . @	7.00	" "	9.10
Hauling @	3.00	" "	3.90
Iron @	2.00	" "	2.60
Nails @	.30	" "	.50
Earth Work			15.00

\$61.80

\$18.50

Gate in Side Ditch.

Sta. —, Type B. \$61.80 \$18.50

Gate in Side Ditch.

Sta. —, Type B. \$61.80 \$30.90

1927 Sidegate.

Sta. 192-32. Width 12 ft. 8". Depth 6 ft. Length 26 ft. 30%

Lumber 2,928 ft.@	\$25.00	per M	\$73.20	
Carpenter Work@	7.00	" "	20.30	
Hauling@	3.00	" "	8.70	
Iron@	2.00	" "	5.80	
Nails@	.30	" "	.90	
Earth Work			25.00	
			<hr/>	
			\$133.90	\$40.20

Gate in Side Ditch.

Sta. —, Type A. \$44.10 \$22.00

Bridge.

Sta. 246-37. Width 18 ft. Length 110 ft. 20%

Lumber 6,910 ft.@	\$25.00	per M	\$172.70	
Carpenter Work@	7.00	" "	48.30	
Hauling@	3.00	" "	20.70	
Iron@	2.00	" "	13.80	
Nails@	.30	" "	2.10	
Earth Work			25.00	
			<hr/>	
			\$282.60	\$56.52

Gate in Side Ditch.

Sta. —, Type C. Width 10 ft. Depth 52". Length 10 ft. 30%

Lumber 1,110 ft.@	\$25.00	per M	\$27.70	
Carpenter Work@	7.00	" "	7.70	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.30	" "	.50	
Earth Work			15.00	
			<hr/>	
			\$56.40	\$16.90

1928 Sidegate.

Sta. 268-54. Width 12 ft. Depth 6 ft. Length 25 ft. 30%

Lumber 3,350 ft.@	\$25.00	per M	\$83.80	
Carpenter Work@	7.00	" "	23.80	
Hauling@	3.00	" "	10.20	
Iron@	2.00	" "	6.80	
Nails@	.30	" "	1.00	
Earth Work			25.00	
			<hr/>	
			\$150.60	\$45.20

Weir.

Sta. 270-24. Width 16 ft. Depth 6 ft. Length 60 ft. 20%

Lumber 16,200 ft. @	\$25.00	per M	\$405.00
Carpenter Work @	7.00	" "	113.40
Hauling @	3.00	" "	48.60
Iron @	2.00	" "	32.40
Nails @	.30	" "	4.90
Earth Work			120.00

\$724.30

\$144.80

Gate in Side Ditch.

Sta. —, Type A \$44.10 \$8.80

Gate in Side Ditch.

Sta. —, Type C \$56.40 \$22.60

Gate in Side Ditch.

Sta. —, Type C \$56.40 \$22.60

1929 Bridge on Sideditch.

Sta. 393-21. Width 16 ft. Length 8 ft. 30%

Lumber 979 ft. @	\$25.00	per M	\$24.50
Carpenter Work @	7.00	" "	7.00
Hauling @	3.00	" "	3.00
Iron @	2.00	" "	2.00
Nails @	.30	" "	.50
Earth Work			25.00

\$62.00

\$18.60

Bridge.

Sta. 393-81. Width 16 ft. Length 20 ft. 30%

Lumber 8,748 ft. @	\$25.00	per M	\$218.70
Carpenter Work @	7.00	" "	60.90
Hauling @	3.00	" "	26.10
Iron @	2.00	" "	17.40
Nails @	.30	" "	2.60
Earth Work			25.00

\$350.70

\$105.20

Bridge.

Sta. 407-37.	Width 16 ft.	Length 80 ft.	30%
Same as Station 393-81.			\$350.70 \$105.20

Weir, in Spillway.

Sta. 407-37.	Width 16 ft.	Depth 6 ft.	Length 40 ft.	20%
Lumber 12,666 ft. . . .	@	\$25.00 per M	\$316.70	
Carpenter Work	@	7.00 " "	88.90	
Hauling	@	3.00 " "	38.10	
Iron	@	2.00 " "	25.40	
Nails	@	.30 " "	3.80	
Earth Work			120.00	
			<u>\$592.90</u>	\$108.60

1930

Sidegate.

Sta. 407-37.	Width 6 ft.	Depth 6 ft.	Length 22 ft.	20%
Lumber 2,002 ft. . . .	@	\$25.00 per M	\$50.00	
Carpenter Work	@	7.00 " "	14.00	
Hauling	@	3.00 " "	6.00	
Iron	@	2.00 " "	4.00	
Nails	@	.30 " "	.60	
Earth Work			25.00	
			<u>\$99.60</u>	\$19.90

Sidegate.

Sta. 407-37.	Width 12 ft.	Depth 70".	Length 22 ft.	20%
Lumber 3,560 ft. . . .	@	\$25.00 per M	\$89.00	
Carpenter Work	@	7.00 " "	25.20	
Hauling	@	3.00 " "	10.70	
Iron	@	2.00 " "	7.20	
Nails	@	.30 " "	1.10	
Earth Work			25.00	
			<u>\$158.30</u>	\$31.60

Weir.

Sta. 408-67.	Width 16 ft.	Depth 6 ft.	Length 60 ft.	20%
Same as Station 270-24.			\$724.30	\$814.80

Gate in Sideditch.

Sta. —, Type C.	\$56.40	\$22.50
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1931

Sidegate.

Sta. 501-21. Width 10 ft. Depth 6 ft. Length 29 ft. 30%

Lumber 3,839 ft.	@	\$25.00	per M	\$95.90
Carpenter Work	@	7.00	" "	25.20
Hauling	@	3.00	" "	11.40
Iron	@	2.00	" "	7.60
Nails	@	.30	" "	1.20
Earth Work				25.00

\$166.30

\$49.90

Gate in Sideditch.

Sta. —, Type A. \$44.10

\$22.00

Gate in Sideditch.

Sta. —, Type A. \$44.10

\$26.40

Bridge.

Sta. 590-99. Width 16 ft. Length 94 ft. 30%

Lumber 10,432 ft. ..	@	\$25.00	per M	\$268.80
Carpenter Work	@	7.00	" "	72.80
Hauling	@	3.00	" "	31.00
Iron	@	2.00	" "	20.80
Nails	@	.30	" "	3.20
Earth Work				25.00

\$413.80

\$124.10

Gate in Sideditch.

Sta. —. Width 16 ft. Depth 64". Length 14 ft.

Lumber 2,283 Ft.	@	\$25.00	per M	\$57.70
Carpenter Work	@	7.00	" "	18.10
Hauling	@	3.00	" "	6.90
Iron	@	2.00	" "	4.60
Nails	@	.30	" "	.70
Earth Work				25.00

\$112.40

\$33.70

1932

Sidegate.

Sta. 602-76. Width 12 ft. Depth 6 ft. Length 30 ft. 30%

Lumber 3,801 ft.	@	\$25.00	per M	\$95.10
Carpenter Work	@	7.00	" "	26.60
Hauling	@	3.00	" "	11.40
Iron	@	2.00	" "	7.60
Nails	@	.30	" "	1.20
Earth work				25.00

\$166.90

\$50.00

Weir.

Sta. 603-96. Width 16 ft. Depth 6 ft. Length 60 ft.	20%
Same as Station 270-24.	\$724.30 \$144.80

Gate in Sideditch.

Sta. —, Type A.	\$44.10 \$13.23
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Gate in Sideditch.

Sta. —, Type C.	\$56.40 \$22.50
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Sidegate.

Sta. 717-19. Width 10 ft. Depth 6 ft. Length 20 ft.	20%
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Lumber 3,005 ft. @	\$25.00 per M	\$75.20
Carpenter Work @	7.00 " "	21.00
Hauling @	3.00 " "	9.00
Iron @	2.00 " "	6.00
Nails @	.30 " "	.90
Earth Work		25.00

\$137.10 \$37.40

Gate in Sideditch.

Sta. —, Type C.	\$56.40 \$22.50
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1933 Gate in Sideditch.

Sta. —, Type C.	\$56.40 \$22.50
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Sidegate.

Sta. 787-33. Width 12 ft. Depth 76". Length 30 ft.	30%
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Lumber 4,053 ft. @	\$25.00 per M	\$110.50
Carpenter Work @	7.00 " "	28.00
Hauling @	3.00 " "	12.00
Iron @	2.00 " "	8.00
Nails @	.30 " "	1.20
Earth Work		25.00

\$175.70 \$52.70

Weir.

Sta. 788-26. Width 16 ft. Depth 6 ft. Length 60 ft.	30%
Same as Station 270-24.	\$724.30 \$217.29

Gate in Sideditch.

Sta. —, Type C. \$56.40 \$22.50

Bridge on Sideditch.

Sta. 853-18. Width 24 ft. Length 10 ft. 40%

Lumber 1,965 ft.	@	\$25.00	per	M	\$49.20
Carpenter Work	@	7.00	"	"	14.00
Hauling	@	3.00	"	"	6.00
Iron	@	2.00	"	"	4.00
Nails	@	.30	"	"	.60
Earth Work					25.00

\$98.80

\$39.50

1934 Bridge.

Sta. 853-18. Width 12 ft. Length 64 ft. 40%

Lumber 7,780 ft.	@	\$25.00	per	M	\$194.50
Carpenter Work	@	7.00	"	"	54.60
Hauling	@	3.00	"	"	23.40
Iron	@	2.00	"	"	15.60
Nails	@	.30	"	"	2.40
Earth Work					25.00

\$315.50

\$126.20

Sidegate.

Sta. 970-22. Width 74". Depth 6 ft. Length 24 ft. 20%

Lumber 1,912 ft.	@	\$25.00	per	M	\$47.80
Carpenter Work	@	7.00	"	"	13.30
Hauling	@	3.00	"	"	5.70
Iron	@	2.00	"	"	2.80
Nails	@	.30	"	"	.60
Earth Work					25.00

\$95.20

\$19.00

Weir & Spillway.

Sta. 970-22. Width 18 ft. Depth 78". Length 24 ft. 20%

Lumber 6,984 ft.	@	\$25.00	per	M	\$174.60
Carpenter Work	@	7.00	"	"	49.00
Hauling	@	3.00	"	"	21.00
Iron	@	2.00	"	"	14.00
Nails	@	.30	"	"	2.10
Earth Work					120.00

\$380.70

\$76.10

1935

Bridge.

Sta. 970-22. Width 16 ft. Length 62 ft. 30%.

Lumber 6,728 ft.	@	\$25.00	per M	\$168.20
Carpenter Work ...	@	7.00	" "	46.90
Hauling	@	3.00	" "	20.10
Iron	@	2.00	" "	13.40
Nails	@	.30	" "	2.00
Earth Work				25.00

\$275.60

\$82.60

Sidegate.

Sta. 970-22. Width 12 ft. Depth 6 ft. Length 25 ft. 20%

Lumber 3,250 ft.	@	\$25.00	per M	\$81.30
Carpenter Work	@	7.00	" "	23.10
Hauling	@	3.00	" "	9.90
Iron	@	2.00	" "	6.60
Nails	@	.30		1.00
Earth Work				25.00

\$146.00

\$29.40

Merced-Fresno County Line.

Station 1002-

Total Cost of Structures \$10,724.00

Total Depreciation " 2,760.14

Present Value \$7,963.86

1936

Dos Palos Canal Fresno County.

Weir.

Sta. 2-31. Shown on Main canal.

Weir.

Sta. 17-09. Width 18 ft. Depth 96". Length 30 ft. 60%

Lumber 12,500 ft. .@	\$25.00	per M	\$312.50
Carpenter Work . .@	7.00	" "	87.50
Hauling@	3.00	" "	37.50
Iron@	2.00	" "	25.00
Nails@	.30	" "	3.80
Earth Work			120.00

\$586.30

\$341.80

Bridge.

Sta. 28-07.	Width 16 ft.	Length 14 ft.	30%
Lumber 1,684 ft. . . @	\$25.00 per M	\$42.10	
Carpenter Work . . . @	7.00 " "	11.90	
Hauling @	3.00 " "	5.10	
Iron @	2.00 " "	3.40	
Nails @	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$88.00	\$26.40

Weir.

Sta. 46-50.	Width 24 ft.	Depth 100"	Length 30 ft.	30%
Same as Station 17-09.			\$586.30	\$175.90

1937

Drain.

Sta. ———.	Width 10 ft.	Depth 4 ft.	Length 60 ft.	60%
Lumber 4,230 ft. . . @	\$25.00 per M	\$105.80		
Carpenter Work . . . @	7.00 " "	30.10		
Hauling @	3.00 " "	12.90		
Iron @	2.00 " "	8.60		
Nails @	.30 " "	1.30		
Earth Work		25.00		
		<hr/>		
		\$183.70		\$110.20

Drain.

Sta. 67-00.	Width 12 ft.	Depth 12 ft.	Length 20 ft.	60%
Lumber 2,400 ft. . . @	\$25.00 per M	\$60.00		
Carpenter Work . . . @	7.00 " "	16.80		
Hauling @	3.00 " "	7.20		
Iron @	2.00 " "	4.80		
Nails @	.30 " "	.80		
Earth Work		25.00		
		<hr/>		
		\$114.60		\$68.70

Sidegate.

Sta. 68-84.	Width 4 ft.	Depth 2 ft.	Length 22 ft.	80%
Lumber 920 ft. . . . @	\$25.00 per M	\$23.00		
Carpenter Work . . . @	7.00 " "	7.00		
Hauling @	3.00 " "	3.00		
Iron @	2.00 " "	2.00		
Nails @	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$58.50		\$46.80

1384 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1938 Sidegate.

Sta. 72-68. Width 16 ft. Depth 82". Length 23 ft. 60%

Lumber 4,040 ft.@	\$25.00	per M	\$101.00	
Carpenter Work@	7.00	" "	28.00	
Hauling@	3.00	" "	12.00	
Iron@	2.00	" "	8.00	
Nails@	.30	" "	1.20	
Earth Work			25.00	
			<hr/>	
			\$175.20	\$105.12

Weir.

Sta. 73-17. Width 18 ft. Depth 96". Length 40 ft. 40%

Same as Station 17-09 \$586.30 \$233.50

Drain.

Sta. 94-68. Obsolete. 100%

Bridge.

Sta. 94-78. Width 16 ft. Length 32 ft. 60%

Lumber 3,192 ft.@	\$25.00	per M	\$79.80	
Carpenter Work@	7.00	" "	22.40	
Hauling@	3.00	" "	9.60	
Iron@	2.00	" "	6.40	
Nails@	.30	" "	1.00	
Earth Work			25.00	
			<hr/>	
			\$144.20	\$85.50

Drain.

Sta. 98-21. Obsolete. 100%

1939 Sidegate.

Sta. 100-69. Width 48". Depth 36". Length 22 ft. 30%

Lumber 907 ft.@	\$25.00	per M	\$22.70	
Carpenter Work@	7.00	" "	6.30	
Hauling@	3.00	" "	2.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$59.00	\$17.70

Sidegate.

Sta. 114-50. Width 30". Depth 20". Length 12 ft. 30%

Lumber 839 ft.@	\$25.00	per M	\$21.00	
Carpenter Work ...@	7.00	" "	6.30	
Hauling@	3.00	" "	2.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
Earthwork			25.00	
			<hr/>	
			\$57.30	\$17.20

Drain.

Sta. 1700-00. Width 2 ft. Depth 3 ft. Length 20 ft. 30%.

Lumber 2,400 ft. ...@	\$25.00	per M	\$50.00	
Carpenter Work ...@	7.00	" "	16.80	
Hauling@	3.00	" "	7.20	
Iron@	2.00	" "	4.80	
Nails@	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$114.60	\$34.40

1940

Sidegate.

Sta. 123-62. Width 4 ft. Depth 3 ft. Length 22 ft. 30%

Earth Work			\$25.00	
Lumber 885 ft. ...@	\$25.00	per M	22.20	
Carpenter Work ...@	7.00	" "	6.30	
Hauling@	3.00	" "	2.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
			<hr/>	
			\$58.50	\$17.50

Drain.

Sta. 131-58. Width 4 ft. Depth 3 ft. Length 20 ft. 40%

Lumber 2,600 ft. ...@	\$25.00	per M	\$65.00	
Carpenter Work ...@	7.00	" "	18.20	
Hauling@	3.00	" "	7.80	
Iron@	2.00	" "	5.20	
Nails@	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$122.00	\$48.80

Spillway.

Sta. 131-58. Width 20 ft. Depth 6 ft. Length 20ft. 40%

Lumber 4,276 ft.@	\$25.00	per M	\$106.90
Carpenter Work@	7.00	" "	30.70
Hauling@	3.00	" "	14.90
Iron@	2.00	" "	8.60
Nails@	.30	" "	1.50
Earth Work			120.00

\$282.60

\$113.00

1941

Sidegate.

Sta. 133-90. Width 4 ft. Depth 4 ft. Length 24 ft. 30%

Lumber 1,057 ft.@	\$25.00	per M	\$29.50
Carpenter Work@	7.00	" "	7.70
Hauling@	3.00	" "	3.30
Iron@	2.00	" "	2.20
Nails@	.30	" "	.50
Earth Work			25.00

\$68.20

\$20.40

Sidegate.

Sta. 143-75. Width 6 ft. Depth 6 ft. Length 20 ft. 40%

Lumber 2,043 ft.@	\$25.00	per M	\$50.10
Carpenter Work@	7.00	" "	14.70
Hauling@	3.00	" "	6.30
Iron@	2.00	" "	4.20
Nails@	.20	" "	.70
Earth Work			25.00

\$101.00

\$40.40

Sidegate.

Sta. 143-21. Width 8 ft. Depth 5 ft. Length 32 ft. 30%

Lumber 2,103 ft.@	\$25.00	per M	\$52.60
Carpenter Work@	7.00	" "	14.70
Hauling@	3.00	" "	6.30
Iron@	2.00	" "	4.20
Nails@	.30	" "	.70
Earth Work			25.00

\$103.50

\$51.70

1942

Weir.

Sta. 148-49. Width 20 ft. Depth 762. Length 44 ft. 60%

Lumber 13,000 ft. . . @	\$25.00 per M	\$325.00	
Carpenter Work . . . @	7.00 " "	91.00	
Hauling @	3.00 " "	30.90	
Iron @	2.00 " "	26.00	
Nails @	.30	4.00	
Earth Work		120.00	
		<hr/>	
		\$605.00	\$363.00

Sidegate.

Sta. 212-99. Width 12 ft. Depth 6 ft. Length 16 ft. 40%

Lumber 2,393 ft. . . @	\$25.00 per M	\$59.80	
Carpenter Work . . . @	7.00 " "	16.80	
Hauling @	3.00 " "	7.20	
Iron @	2.00 " "	4.80	
Nails @	.30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$114.30	\$45.70

Bridge.

Sta. 217-13. Width 16 ft. Length 44 ft. 40%

Lumber 4,709 ft. . . @	\$25.00 per M	\$117.70	
Carpenter Work . . . @	7.00 " "	32.90	
Hauling @	3.00 " "	14.10	
Iron @	2.00 " "	8.40	
Nails @	.30 " "	1.40	
Earth Work		25.00	
		<hr/>	
		\$200.50	\$80.20

1943

Sidegate.

Sta. 224-76 Width 8 ft. Depth 5 ft. Length 20 ft. 40%

Lumber 2,093 ft. . . @	\$25.00 per M	\$21.00	
Carpenter Work . . . @	7.00 " "	12.60	
Hauling @	3.00 " "	5.40	
Iron @	2.00 " "	3.60	
Nails @	.30 " "	.60	
Earthwork		25.00	
		<hr/>	
		\$68.20	\$27.30

Sidegate.

Sta. 236-44. Width 4 ft. Depth 5 ft. Length 20 ft. 40%

Lumber 1,541 ft...@	\$25.00 per M	\$38.60	
Carpenter Work ...@	7.00 " "	11.20	
Hauling@	3.00 " "	4.80	
Iron@	2.00 " "	3.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$83.30	\$33.30

Sidegate.

Sta. 240-90. Width 6 ft. Depth 3 ft. Length 20 ft. 50%

Lumber 775 ft. ...@	\$25.00 per M	\$19.40	
Carpenter Work ..@	7.00 " "	5.60	
Hauling@	3.00 " "	2.40	
Iron@	2.00 " "	1.60	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$54.50	\$27.20

1944

Sidegate.

Sta. 255-67. Width 8 ft. Depth 7 ft. Length 20 ft. 50%

Lumber 2,843 ft...@	\$25.00 per M	\$71.10	
Carpenter Work ..@	7.00 " "	18.90	
Hauling@	3.00 " "	8.10	
Iron@	2.00 " "	5.40	
Nails@	.30 " "	.80	
Earth Work		25.00	
		<hr/>	
		\$129.30	\$64.60

Sidegate.

Sta. 255-86. Width 8 ft. Depth 7 ft. Length 20 ft. 50%

Lumber 2,843 ft...@	\$25.00 per M	\$71.10	
Carpenter Work ..@	7.00 " "	18.90	
Hauling@	3.00 " "	8.10	
Iron@	2.00 " "	5.40	
Nails@	.30 " "	.80	
Earth Work		25.00	
		<hr/>	
		\$129.30	\$64.60

Sidegate.

Sta. 260-27. Width 30". Depth 4 ft. Length 24 ft. 30%

Lumber 1,004 ft....@	\$25.00	per M	\$25.10
Carpenter Work ..@	7.00	" "	7.00
Hauling@	3.00	" "	3.00
Iron@	2.00	" "	2.00
Nails@	.30	" "	.50
Earth Work			25.00

\$62.60

\$18.70

1945

Sidegate.

Sta. 263-86. Width 24 ft. Depth 4 ft. Length 24 ft. 50%

Lumber 744 ft....@	\$25.00	per M	\$18.60
Carpenter Work ..@	7.00	" "	5.60
Hauling@	3.00	" "	2.40
Iron@	2.00	" "	1.60
Nails@	.30	" "	.50
Earth Work			25.00

\$53.70

\$26.80

Sidegate.

Sta. 272-18. Width 8 ft. Depth 76". Length 20 ft. 60%

Lumber 2,867 ft....@	\$25.00	per M	\$71.70
Carpenter Work ..@	7.00	" "	20.30
Hauling@	3.00	" "	8.70
Iron@	2.00	" "	5.80
Nails@	.30	" "	.90
Earth Work			25.00

\$132.40

\$79.40

Weir.

Sta. 272-54. Width 20 ft. Depth 6 ft. Length 38 ft. 40%

Same as Station 17-09 \$586.30 \$234.50

Sidegate.

Sta. 283-54. Width 8 ft. Depth 5 ft. Length 20 ft. 40%

Lumber 2,257 ft....@	\$25.00	per M	\$56.40
Carpenter Work ..@	7.00	" "	16.10
Hauling@	3.00	" "	6.90
Iron@	2.00	" "	4.60
Nails@	.30	" "	.70
Earth Work			25.00

\$109.50

\$43.80

1390

THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1946

Sidegate.

Sta. 299-06. Width 86". Depth 72". Length 16 ft. 60%

Lumber 1,698 ft...@	\$25.00 per M	\$42.50
Carpenter Work ..@	7.00 " "	11.90
Hauling@	3.00 " "	5.10
Iron@	2.00 " "	3.40
Nails@	.30 " "	.50
Earth Work		25.00

\$88.40

\$53.00

Bridge.

Sta. 293-50. Width 16 ft. Length 42 ft. 40%

Lumber 4,539 ft...@	\$25.00 per M	\$113.50
Carpenter Work ..@	7.00 " "	31.50
Hauling@	3.00 " "	13.50
Iron@	2.00 " "	9.00
Nails@	.30 " "	1.40
Earth Work		25.00

\$193.90

\$77.50

Sidegate.

Sta. 307-75. Width 8 ft. Depth 90". Length 26 ft. 50%

Lumber 3,728 ft...@	\$25.00 per M	\$93.20
Carpenter Work ..@	7.00 " "	25.90
Hauling@	3.00 " "	11.10
Iron@	2.00 " "	7.40
Nails@	.30 " "	1.20
Earth Work		25.00

\$163.80

\$81.90

1947

Sidegate.

Sta. 307-64. Width 20". Depth 2 ft. Length 16 ft. 40%

Lumber 5,062 ft...@	\$25.00 per M	\$13.80
Carpenter Work ..@	7.00 " "	3.50
Hauling@	3.00 " "	1.50
Iron@	2.00 " "	1.00
Nails@	.30 " "	.50
Earth Work		25.00

\$45.30

\$18.10

Sidegate.

Sta. ———.	Width 3 ft.	Depth 30".	Length 20 ft.	50%
Lumber 748 ft.....@	\$25.00	per M	\$18.70	
Carpenter Work ..@	7.00	" "	5.60	
Hauling@	3.00	" "	2.40	
Iron@	2.00	" "	1.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/> \$53.80	\$26.90

Weir.

Sta. 308-56.	Width 20 ft.	Depth 94".	Length 37 ft.	20%
Lumber 12,912 ft..@	\$25.00	per M	\$322.80	
Carpenter Work ..@	7.00	" "	91.00	
Hauling@	3.00	" "	39.00	
Iron@	2.00	" "	26.00	
Nails@	.30	" "	3.90	
Earth Work			120.00	
			<hr/> \$602.70	\$120.50

1948

Sidegate.

Sta. 325-74.	Width 3 ft.	Depth 3 ft.	Length 20 ft.	30%
Lumber 762 ft.@	\$25.00	per M	\$19.10	
Carpenter Work@	7.00	" "	5.30	
Hauling@	3.00	" "	2.30	
Iron@	2.00	" "	1.50	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/> \$53.70	\$16.10

Bridge.

Sta. 329-12.	Width 16 ft.	Length 40 ft.	30%
Lumber 3,922 ft.@	\$25.00	per M	\$98.10
Carpenter Work@	7.00	" "	27.30
Hauling@	3.00	" "	11.70
Iron@	2.00	" "	7.80
Nails@	.30	" "	1.20
Earth Work			25.00
			<hr/> \$171.10
			\$51.30

Bridge.

Sta. 335-46.	Width 16 ft.	Length 30 ft.	20%
Lumber 3,024 ft.	@ \$25.00	per M	\$75.60
Carpenter Work	@ 7.00	" "	21.00
Hauling	@ 3.00	" "	9.00
Iron	@ 2.00	" "	6.00
Nails	@ .30	" "	.90
Earth Work			25.00
			<hr/>
			\$137.50
			\$27.50

1949

Sidegate.

St'n 348-34.	Width 50".	Depth 4 ft.	Length 20 ft.	40%
Lumber 1,101 ft.	@ \$25.00	per M	\$27.80	
Carpenter Work	@ 7.00	" "	7.70	
Hauling	@ 3.00	" "	3.30	
Iron	@ 2.00	" "	2.20	
Nails	@ .30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$66.50	\$26.60

Sidegate.

St'n 355-66.	Width 4 ft.	Depth 5 ft.	Length 24 ft.	40%
Lumber 1,520 ft.	@ \$25.00	per M	\$38.00	
Carpenter Work	@ 7.00	" "	10.50	
Hauling	@ 3.00	" "	4.50	
Iron	@ 2.00	" "	3.00	
Nails	@ .30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$81.50	\$32.60

Sidegate.

St'n 359-22.	Width 15 ft.	Depth —".	Length 26 ft.	40%
Lumber 3,643 ft.	@ \$25.00	per M	\$91.00	
Carpenter Work	@ 7.00	" "	25.20	
Hauling	@ 3.00	" "	10.80	
Iron	@ 2.00	" "	7.20	
Nails	@ .30	" "	1.10	
Earth Work			25.00	
			<hr/>	
			\$160.30	\$64.10

1950

Weir & Bridge.

Sta. 351-56. Width 25 ft. Diph 6 ft. Length 36 ft. 30%

Lumber 16,392 ft. . .	@	\$25.00	per M	\$409.80	
Carpenter Work . . .	@	7.00	" "	114.80	
Hauling	@	3.00	" "	49.20	
Iron	@	2.00	" "	32.80	
Nails	@	.30	" "	5.00	
Earth Work	@		" "	120.00	
				<hr/>	
				\$731.60	\$219.50

Sidegate.

Sta. 369-75. Width 78". Depth 5 ft. Length 24 ft. 40%.

Lumber 1,913 ft. . . .	@	\$25.00	per M	\$47.80	
Carpenter Work	@	7.00	" "	13.30	
Hauling	@	3.00	" "	5.70	
Iron	@	2.00	" "	3.80	
Nails	@	.30	" "	.60	
Earth Work	@			25.00	
				<hr/>	
				\$96.20	\$38.30

Sidegate.

Sta. 397-13. Width 44". Depth 44". Length 20 ft. 30%.

Lumber 1,036 ft.	@	\$25.00	per M	\$25.90	
Carpenter Work	@	7.00	" "	7.00	
Hauling	@	3.00	" "	3.00	
Iron	@	2.00	" "	2.00	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$63.40	\$19.00

1951

Sidegate.

Sta. 388-24. Width 44". Depth 4 ft. Length 20 ft. 30%

Lumber 1,036 ft.	@	\$25.00	per M	\$25.90	
Carpenter Work	@	7.00	" "	7.00	
Hauling	@	3.00	" "	3.00	
Iron	@	2.00	" "	2.00	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$61.40	\$18.40

Drain.

Sta. 388-77. Covered with Earth.

Bridge.

Sta. 388-77.	Width 96 ft.	Length 90 ft.	30%
Lumber 9,585 ft.	@	\$25.00 per M	\$239.60
Carpenter Work	@	7.00 " "	67.20
Hauling	@	3.00 " "	28.80
Iron	@	2.00 " "	19.20
Nails	@	.30 " "	2.90
Earth Work			25.00
			<hr/>
			\$382.70
			\$114.80

Sidegate.

Sta. 393-58.	Width 5 ft.	Depth 64".	Length 23 ft.	40%.
Lumber 1,847 ft.	@	\$25.00	per M	\$46.20
Carpenter Work	@	7.00	" "	12.60
Hauling	@	3.00	" "	5.40
Iron	@	2.00	" "	3.60
Nails	@	.30	" "	.50
Earth Work				25.00
				<hr/>
				\$93.30
				\$37.30

1952

Sidegate.

Sta. 396-44.	Width 4 ft.	Depth 30".	Length 20 ft.	40%
Lumber 851 ft.	@	\$25.00 per M	\$21.30	
Carpenter Work	@	7.00 " "	5.90	
Hauling	@	3.00 " "	2.50	
Iron	@	2.00 " "	1.70	
Nails	@	.30 " "	.50	
Earth Work			25.00	
			<hr/>	
			\$56.90	\$22.80

Sidegate.

Sta. 397-62.	Width 62".	Depth 72".	Length 32 ft.	30%.
Lumber 1,698 ft.	@	\$25.00 per M	\$42.50	
Carpenter Work	@	7.00 " "	11.90	
Hauling	@	3.00 " "	5.10	
Iron	@	2.00 " "	3.40	
Nails	@	.30 " "	.50	
Earth Work			25.00	
			<hr/>	
			\$88.40	\$26.50

Sidegate for Lateral.

Sta. 401-95. Width 34". Depth 6 ft. Length 20 ft. 50%.

Lumber 1,779 ft.	@	\$25.00	per	M	\$44.50	
Carpenter Work	@	7.00	"	"	12.60	
Hauling	@	3.00	"	"	5.40	
Iron	@	2.00	"	"	3.60	
Nails	@	.30	"	"	.50	
Earth Work					25.00	
					<hr/>	
					\$91.60	\$45.80

1953 Weir.

Sta. 403-82. Width 20 ft. Depth 6 ft. Length 30 ft. 40%.

Lumber 10,200 ft. ...	@	\$25.00	per	M	\$255.00	
Carpenter Work	@	7.00	"	"	71.40	
Hauling	@	3.00	"	"	30.60	
Iron	@	2.00	"	"	20.40	
Nails	@	.30	"	"	3.10	
Earth Work					120.00	
					<hr/>	
					\$500.50	\$200.20

Sidegate.

Sta. 405-06. Width 32". Depth 32". Length 20 ft. 30%.

Lumber 683 ft.	@	\$25.00	per	M	\$17.10	
Carpenter Work	@	7.00	"	"	4.80	
Hauling	@	3.00	"	"	2.10	
Iron	@	2.00	"	"	1.40	
Nails	@	.30	"	"	.50	
Earth Work					25.00	
					<hr/>	
					\$40.90	\$12.30

Sidegate.

Sta. 409-64. Width 4 ft. Depth 54". Length 22 ft. 40%

Lumber 1,160 ft.	@	\$25.00	per	M	\$29.00	
Carpenter Work	@	7.00	"	"	8.40	
Hauling	@	3.00	"	"	3.60	
Iron	@	2.00	"	"	2.40	
Nails	@	.30	"	"	.50	
Earth Work					25.00	
					<hr/>	
					\$68.90	\$27.60

1396 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1954

Sidegate.

Sta. 416-41. Width 24". Depth 36". Length 20 ft. 40%.

Lumber 698 ft.	@	\$25.00	per M	\$17.40
Carpenter Work	@	7.00	" "	4.80
Hauling	@	3.00	" "	2.10
Iron	@	2.00	" "	1.40
Nails	@	.30	" "	.50
Earth Work				25.00

\$51.20

\$20.50

Sidegate.

Sta. 419-68. Width 3 ft. Depth 42". Length 20 ft. 40%.

Lumber 899 ft.	@	\$25.00	per M	\$22.50
Carpenter Work	@	7.00	" "	6.10
Hauling	@	3.00	" "	2.70
Iron	@	2.00	" "	1.80
Nails	@	.30	" "	.50
Earth Work				25.00

\$58.60

\$21.30

Sidegate.

Sta. 421-56. Width 3 ft. Depth 3 ft. Length 22 ft. 40%.

Lumber 782 ft.	@	\$25.00	per M	\$19.50
Carpenter Work	@	7.00	" "	5.50
Hauling	@	3.00	" "	2.20
Iron	@	2.00	" "	1.60
Nails	@	.30	" "	.50
Earth Work				25.00

\$44.30

\$17.70

1955

Bridge.

Sta. 425-66. Width 16 ft. Length 134 ft. 40%.

Lumber 1,494 ft.	@	\$25.00	per M	\$357.40
Carpenter Work	@	7.00	" "	100.10
Hauling	@	3.00	" "	42.90
Iron	@	2.00	" "	29.00
Nails	@	.30	" "	4.30
Earth Work				25.00

\$558.70

\$223.50

Sidegate.

Sta. 426-63. Width 6 ft. Depth 6 ft. Length 20 ft. 50%.

Lumber 1,532 ft.	@	\$25.00	per M	\$38.30
Carpenter Work	@	7.00	" "	10.50
Hauling	@	3.00	" "	4.50
Iron	@	2.00	" "	3.00
Nails	@	.30	" "	.50
Earth Work				25.00

\$81.80

\$40.90

Measuring Gate.

Sta. 426-63. Width 4 ft. Depth 4 ft. Length 5 ft. 20%.

Lumber 489 ft.	@	\$25.00	per M	\$12.20
Carpenter Work	@	7.00	" "	3.40
Hauling	@	3.00	" "	1.50
Iron	@	2.20	" "	1.00
Nails	@	.30	" "	.50
Earth Work				25.00

\$43.60

\$8.70

1956

Bridge.

Sta. 429-47. Width 24 ft. Dep. —. Length 30 ft. 40%.

Lumber 5,053 ft.	@	\$25.00	per M	\$126.30
Carpenter Work	@	7.00	" "	35.00
Hauling	@	3.00	" "	15.00
Iron	@	2.00	" "	10.00
Nails	@	.30	" "	1.50
Earth Work				25.00

\$212.80

\$85.10

Sidegate.

Sta. 429-86. Width 50". Depth 66". Length 38 ft. 40%.

Lumber 2,197 ft.	@	\$25.00	per M	\$54.90
Carpenter Work	@	7.00	" "	15.40
Hauling	@	3.00	" "	6.60
Iron	@	2.00	" "	4.40
Nails	@	.30	" "	.70
Earth Work				25.00

\$107.00

\$42.80

Sidegate.

Sta. 429-86.	Width 4 ft.	Depth 6 ft.	Length 20 ft.	40%.
Lumber 1,291 ft.	@	\$25.00 per M	\$32.30	
Carpenter Work	@	7.00 " "	9.10	
Hauling	@	3.00 " "	3.90	
Iron	@	2.00 " "	2.60	
Nails	@	.30 " "	.50	
Earth Work			25.00	
			<hr/>	
			\$73.40	\$29.40

1957

Sidegate.

Sta. 448-20.	Width 32".	Depth 44".	Length 22 ft.	30%.
Lumber 906 ft.	@	\$25.00 per M	\$22.60	
Carpenter Work	@	7.00 " "	6.30	
Hauling	@	3.00 " "	2.70	
Iron	@	2.00 " "	1.80	
Nails	@	.30 " "	.50	
Earth Work			25.00	
			<hr/>	
			\$58.90	\$17.70

Measuring Gate.

Sta. 428-20.	Width 12 ft.	Depth 64".	Length 16 ft.	30%.
Lumber 1,875 ft.	@	\$25.00 per M	\$46.80	
Carpenter Work	@	7.00 " "	13.30	
Hauling	@	3.00 " "	5.70	
Iron	@	2.00 " "	3.80	
Nails	@	.30 " "	.50	
Earth Work			25.00	
			<hr/>	
			\$95.10	\$28.50

Measuring Gate.

Sta. 448-20.	Width 4 ft.	Depth 54".	Length 6 ft.	30%.
Lumber 526 ft.	@	\$25.00 per M	\$13.10	
Carpenter Work	@	7.00 " "	3.60	
Hauling	@	3.00 " "	1.70	
Iron	@	2.00 " "	1.10	
Nails	@	.30 " "	.50	
Earth Work			25.00	
			<hr/>	
			\$45.00	\$13.50

1958

Weir.

Sta. 438-43. Width 20 ft. Depth 84". Length 36 ft. 40%

Lumber 12,000 ft...@	\$25.00 per M	\$300.00	
Carpenter Work ...@	7.00 " "	84.00	
Hauling@	3.00 " "	36.00	
Iron@	2.00 " "	24.00	
Nails@	.30 " "	3.60	
Earth Work		120.00	
		<u>\$567.60</u>	\$227.00

Sidegate.

Sta. 440-64. Width 2 ft. Depth 3 ft. Length 22 ft. 40%

Earth Work		\$25.00	
Lumber 808 ft. ...@	\$25.00 per M	\$20.20	
Carpenter Work ...@	7.00 " "	5.60	
Hauling@	2.00 " "	2.40	
Iron@	2.00 " "	1.60	
Nails@	.30 " "	.50	
		<u>\$55.30</u>	\$22.10

Sidegate.

Sta. 450-86. Width 4 ft. Depth 50". Length 20 ft. 40%

Lumber 1,072 ft...@	\$25.00 per M	\$26.80	
Carpenter Work ..@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<u>\$65.50</u>	\$26.20

1959

Sidegate.

Sta. 455-17. Width 2 ft. Depth 32". Length 20 ft. 40%

Lumber 684 ft....@	\$25.00 per M	\$17.10	
Carpenter Work ..@	7.00 " "	4.80	
Hauling@	3.00 " "	2.00	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<u>\$51.80</u>	\$20.70

Sidegate.

Sta. 455-54. Width 4 ft. Depth 50". Length 22 ft. 50%

Lumber 1,226 ft.@	\$25.00	per M	\$30.60
Carpenter Work@	7.00	" "	8.40
Hauling@	3.00	" "	3.60
Iron@	2.00	" "	2.40
Nails@	.30	" "	.50
Earth Work			25.00

\$70.50

\$35.20

Sidegate.

Sta. 459-13. Width 3 ft. Depth 4 ft. Length 20 ft. 40%

Lumber 1,049 Ft.@	\$25.00	per M	\$26.20
Carpenter Work@	7.00	" "	7.00
Hauling@	3.00	" "	3.00
Iron@	2.00	" "	2.00
Nails@	.30	" "	.50
Earth Work			25.00

\$63.70

\$25.50

1960

Sidegate.

Sta. 462-05 Width 62". Depth 5 ft. Length 23 ft. 40%

Lumber 1,640 ft.@	\$25.00	per M	\$41.00
Carpenter Work@	7.00	" "	11.90
Hauling@	3.00	" "	5.10
Iron@	2.00	" "	3.40
Nails@	.30	" "	.60
Earth Work			25.00

\$87.00

\$34.80

Bridge.

Sta. 465-90. Width 25 ft. Length 40 ft. 50%

Lumber 6,251 ft.@	\$25.00	per M	\$156.20
Carpenter Work@	7.00	" "	43.40
Hauling@	3.00	" "	18.80
Iron@	2.00	" "	12.40
Nails@	.30	" "	1.90
Earth Work			25.00

\$257.70

\$128.80

Sidegate.

Sta. 466-87. Width 6 ft. Depth 54". Length 24 ft. 40%

Lumber 1,932 ft....@	\$25.00	per M	\$48.30	
Carpenter Work ...@	7.00	" "	13.30	
Hauling@	3.00	" "	5.70	
Iron@	2.00	" "	3.80	
Nails@	.30	" "	.60	
Earth Work			25.00	
			<hr/>	
			\$96.70	\$38.80

1961

Sidegate.

Sta. 469-09. Width 3 ft. Depth 3 ft. Length 24 ft. 30%

Lumber 879 ft....@	\$25.00	per M	\$21.90	
Carpenter Work ...@	7.00	" "	6.10	
Hauling@	3.00	" "	2.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$58.00	\$17.40

Merced-Fresno County Line.

Station 469-50.

Total Cost of Structures.....	\$13,083.90
Total Depreciation	4,534.60
	<hr/>
Present Value	\$8,549.30

1962

Fresno County Miscellaneous Structures.

China Slough Headgate.

Sta. 0-00. Width 24 ft. Depth 12 ft. Length 80 ft. 30%

Lumber 27,520 ft...@	\$25.00	per M	\$688.00	
Carpenter Work ...@	7.00	" "	192.50	
Hauling@	3.00	" "	82.50	
Iron@	2.00	" "	55.00	
Nails@	.30	" "	8.30	
Earth Work			120.00	
			<hr/>	
			\$1,146.30	\$343.90

Buildings Head Work.

House	\$350.00	20%
Barn	175.00	
Tool House	75.00	
Out Buildings	25.00	
Granery	20.00	
Geneces, etc.		150.00
Levees	250.00	
	<hr/>	
	\$1,245.00	\$249.00

Bridge China Slough.

Sta. ———	Width 16 ft.	Length 83 ft.	30%
Lumber 9,510 ft...@ \$25.00 per M		\$237.80	
Carpenter Work ...@ 7.00 " "		66.50	
Hauling@ 3.00 " "		28.50	
Iron@ 2.00 " "		19.00	
Nails@ .30 " "		2.90	
Earth Work		25.00	
		<hr/>	
		\$379.70	\$113.91
Total cost of structures		2,761.00	
Total Depreciation "		706.80	
		<hr/>	
Present Value.....		\$2,554.20	

1963 *Estimate of Value of the San Joaquin & Kings River Canal & Irrigation Company's Canal, Merced County, California.*

Total Present Value of Structures.....	\$48,593.30
Total Present Value of Earth Work	133,475.90
Engineering & Supervision, 10%.....	18,052.00
Contingencies, 10%	18,052.00
	<hr/>
Total Value	\$218,173.20

1964 Earth Work in Merced County, Main Canal.

Sta. 1126-00—1343-00	145,288 cu. yds.
Sta. 1343-00—1460-00	70,092 yds.
Sta. 1460-00—1550-00	65,054 yds.
Sta. 1550-00—1660-00	70,206 yds.
Sta. 1660-00—1759-35	76,411 yds.
Sta. 1759-35—1890-51	84,088 yds.
Sta. 1890-51—1986-58	77,871 yds.
Sta. 1986-58—1995-29	7,934 yds.
Sta. 1995-29—2007-51	Los Banos Creek.

Sta. 2007-51—2090-00	68,588 yds.
Sta. 2090-00—2260-00	121,412 yds.
Sta. 2260-00—2400-00	70,604 yds.
Sta. 2400-00—2590-00	172,639 yds.
Sta. 2590-00—2768-82	111,265 yds.
Sta. 2768-82—3009-12	140,524 yds.
Sta. 3009-12—3225-00	94,348 yds.

Total Earth Work 1,376,324 yds.

Cost 1,376,324 yds. @ \$.05..... \$68,816.20

Earth Work in Merced County, Outside Canal.

1102-00—1140-00	59,037 yds.
Sta. 1140-00—1349-70	102,753 yds.
Sta. 1349-70—1518-92	93,159 yds.
Sta. 1518-92—1760-00	111,451 yds.
Sta. 1760-00—1900-00	123,060 yds.
Sta. 1900-00—2020-00	79,332 yds.
Sta. 2020-00—2140-00	52,812 yds.
Sta. 2140-00—2230-00	35,875 yds.

Carried Forward 657,487 yds.

1965

Brought forward	654,487 yds.
Sta. 2230-00—2290-00	26,568 yds.
Sta. 2290-00—2370-00	30,768 yds.
Sta. 2370-00—2567-95	80,584 yds.

Total Earth Work 795,398 yds.

Cost 795,397 yds. @ \$.06..... \$47,623.80

Earth Work in Merced County, Dos Palos Canal.

Sta. 469-50— 757-00 119,772 yds.

Cost 119,772 yds. @ \$.07 \$8,384.10

Sideditch, Outside Canal.

Sta. 1002-00—1140-00	7,240 yds.
Sta. 1140-00—1349-70	9,837 yds.
Sta. 1349-70—1518-92	12,126 yds.
Sta. 1518-92—1579-90	3,726 yds.
Sta. 1579-90—1759-33	10,977 yds.

Total Earth Work 36,666 yds.

Cost 36,666 yds. @ \$.07..... \$2,566.60

Sideditch, Main Canal.

Sta. 1460-00—1550-00	12,890 yds.
Sta. 1550-00—1660-00	12,222 yds.
Sta. 1660-00—1759-35	11,896 yds.
Sta. 1759-35—1890-51	21,655 yds.
Sta. 1890-51—1995-29	6,910 yds.

Total Earth Work 65,573 yds.

Cost 65,573 yds. @ \$.07 \$4,590.10

1966 Spillways, Outside Canal, in Merced County.

No. 4 Length 1,779 ft.	5,924 yds. @ \$.07	\$414.80
No. 5 Length 6,715 ft.	15,447 yds. @ \$.07	\$1,081.30

Gates in Spillway No. 4.

Width 20 ft.	Depth 10 ft.	Length 20 ft.
Lumber 6,892 ft.	Cost \$377.20	Dep. 30% \$113.20
3 Gates as above.	Total for Spillway	\$1,131.60 \$339.60

Gates in Spillway No. 5.

Sta. 15-51.	Bridge Width 24 ft.	Length 28 ft.	30%
Cost		\$240.00	\$72.00
Sta. 17-26	Weir	Width 20 ft. Depth 8 ft. Length 16 ft.	30%
Sta. 25-48	"	" " " " " " " "	" " "
Sta. 34-59	"	" " " " " " " "	" " "
Sta. 47-75	"	" " " " " " " "	" " "
Sta. 56-76	"	" " " " " " " "	" " "
Cost of above	\$386.00 each	\$1,950.00	\$579.00

Canal Camps.

Camp 13.	House	\$375.00	
	Barn	175.00	
	Out Build.	75.00	
	Fences, etc.	50.00	
		<hr/>	
		\$675.00	\$202.50
Sta. 1775.	Outside Canal		30%
	House	\$350.00	
	Barn	175.00	
	Bunk House	75.00	
	Out buildings	75.00	
	Fences, etc.	75.00	
		<hr/>	
		\$750.00	225.00

1967

Sta. 2257.	Main Canal		30%
	House	\$350.00	
	Barn	175.00	
	Bunk house	45.00	
	Fences, etc.	35.00	
	Well, etc.	75.00	
		<hr/>	
		\$680.00	\$204.00

Telephone Lines, Merced County.

38.8 miles @ \$115.00 per Mile	\$4,557.00	30%
1/2 Charged to Miller & Lux	2,278.50	
1/2 Charged to Canal Company	2,278.50	\$683.50

1968

Dos Palos Canal, Merced County.

Station 469-50.

Sta. 474-56. New Structure.

Sidegate.

Sta. 499-17.	Width 4 ft.	Depth 64".	Length 22 ft.	30%
Lumber 1,507 ft. . . @	\$25.00	per M	\$37.60	
Carpenter Work . . @	7.00	" "	10.50	
Hauling @	3.00	" "	4.50	
Iron @	2.00	" "	3.00	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$81.10	\$24.30

Sidegate.

Sta. 479-17.	Width 3 ft.	Depth 4 ft.	Length 21 ft.	30%
Lumber 1,213 ft. . . @	\$25.00	per M	\$30.30	
Carpenter Work . . @	7.00	" "	8.40	
Hauling @	3.00	" "	3.60	
Iron @	2.00	" "	2.40	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$70.20	\$21.00

Weir.

Sta. 479-20. Width 20 ft. Depth 6 ft. Length 38 ft. 40%

Lumber 12,000 ft.@	\$25.00	per M	\$300.00	
Carpenter Work@	7.00	" "	84.00	
Hauling@	3.00	" "	36.00	
Iron@	2.00	" "	24.00	
Nails@	.30	" "	3.60	
Earth Work			120.00	
			<hr/>	
			\$567.60	\$237.00

1969

Sideditch.

Sta. 488-09. Width 2 ft. Depth 42". Length 24 ft. 40%

Lumber 991 ft.@	\$25.00	per M	\$24.80	
Carpenter Work@	7.00	" "	6.90	
Hauling@	3.00	" "	2.90	
Iron@	2.00	" "	2.00	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$62.10	\$24.90

Bridge.

Sta. 492-28. Width 16 ft. Length 42 ft. 40%

Lumber 4,541 ft.@	\$25.00	per M	\$113.50	
Carpenter Work@	7.00	" "	31.50	
Hauling@	3.00	" "	13.50	
Iron@	2.00	" "	9.00	
Nails@	.30	" "	1.40	
Earth Work			25.00	
			<hr/>	
			\$193.90	\$77.60

Sidegate.

Sta. 492-97. Width ———. Filled with Mud. Obsolete.

Sidegate.

Sta. 499-35. Width 3 ft. Depth 3 ft. Length 24 ft. 30%

Lumber 924 ft.@	\$25.00	per M	\$23.10	
Carpenter Work@	7.00	" "	6.40	
Hauling@	3.00	" "	8.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$59.50	\$17.80

1970

Sidegate, Lateral.

Station 499-76.

Sta. 499-76. Width 18 ft. Depth 90". Length 21 ft. 50%

Lumber 3,925 ft.@	\$25.00 per M	\$98.10	
Carpenter Work@	7.00 " "	27.30	
Hauling@	3.00 " "	11.70	
Hauling@	2.00 " "	7.80	
Nails@	.30 " "	1.20	
Earth Work		25.00	
		<hr/>	
		\$171.10	\$85.50

Weir.

Sta. 502-52. Width 20 ft. Depth 8 ft. Length 38 ft. 60%

Lumber 12,000 ft.@	\$25.00 per M	\$300.00	
Carpenter Work@	7.00 " "	84.00	
Hauling@	3.00 " "	36.00	
Iron@	2.00 " "	24.00	
Nails@	.30 " "	3.60	
Earth Work		120.00	
		<hr/>	
		\$567.60	\$340.60

Sidegate.

Sta. 502-72. Width 3 ft. Depth 30". Length 20 ft. 40%

Lumber 725 ft.@	\$25.00 per M	\$18.10	
Carpenter Work@	7.00 " "	5.00	
Hauling@	3.00 " "	2.10	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$52.10	\$20.80

1971

Sidegate.

Sta. 502-84. Width 32". Depth 40". Length 20 ft. 40%

Lumber 815 ft.@	\$25.00 per M	\$20.40	
Carpenter Work@	7.00 " "	5.70	
Hauling@	3.00 " "	2.40	
Iron@	2.00 " "	1.60	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$45.60	\$18.20

Sidegate.

Sta. 506-44.	Width 40".	Depth 40".	Length 20 ft.	30%
Lumber 839 ft....@	\$25.00	per M	\$21.00	
Carpenter Work ..@	7.00	" "	5.80	
Hauling@	3.00	" "	2.40	
Iron@	2.00	" "	1.70	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$56.40	\$16.90

Sidegate.

Sta. 506-47.	Width 4 ft.	Depth 52".	Length 21 ft.	40%
Lumber 1,256 ft...@	\$25.00	per M	\$31.40	
Carpenter Work ..@	7.00	" "	8.40	
Hauling@	3.00	" "	3.60	
Iron@	2.00	" "	2.40	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$69.30	\$27.70

1972

Sidegate.

Sta. 513-01.	Width 2 ft.	Depth 42".	Length 20 ft.	30%
Lumber 760 ft....@	\$25.00	per M	\$19.00	
Carpenter Work ..@	7.00	" "	5.60	
Hauling@	3.00	" "	2.40	
Iron@	2.00	" "	1.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$54.10	\$16.20

Sidegate.

Sta. 515-78.	Width 2 ft.	Depth 42".	Length 24 ft.	30%
Lumber 991 ft....@	\$25.00	per M	\$24.70	
Carpenter Work ..@	7.00	" "	6.90	
Hauling@	3.00	" "	2.90	
Iron@	2.00	" "	1.90	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$61.90	\$18.60

Sidegate.

Sta. 519-59. Width 6 ft. Depth 4 ft. Length 21 ft. 30%

Lumber 1,352 ft...@	\$25.00 per M	\$33.70	
Carpenter Work ..@	7.00 " "	9.10	
Hauling@	3.00 " "	3.90	
Iron@	2.00 " "	2.60	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$74.80	\$22.40

1973 Sidegate.

Sta. 519-69. Width 46". Depth 48". Length 20 ft. 30%

Lumber 1,083 ft...@	\$25.00 per M	\$27.10	
Carpenter Work ..@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$57.80	\$17.30

Sidegate.

Sta. 524-44. Width 2 ft. Depth 3 ft. Length 24 ft. 30%

Lumber 845 ft....@	\$25.00 per M	\$21.10	
Carpenter Work ..@	7.00 " "	5.80	
Hauling@	3.00 " "	2.50	
Iron@	2.00 " "	1.70	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$56.60	\$17.00

Bridge.

Sta. 526-20. Width 18 ft. Length 42 ft. 20%

Lumber 6,064 ft...@	\$25.00 per M	\$151.60	
Carpenter Work ..@	7.00 " "	42.00	
Hauling@	3.00 " "	18.00	
Iron@	2.00 " "	12.00	
Nails@	.30 " "	1.80	
Earth Work		25.00	
		<hr/>	
		\$252.40	\$50.50

1974

Sidegate.

Sta. 528-81. Width 5 ft. Depth 68". Length 21 ft. 50%.

Lumber 1,870 ft....@	\$25.00	per M	\$46.70
Carpenter Work....@	7.00	" "	13.30
Hauling@	3.00	" "	5.70
Iron@	2.00	" "	3.80
Nails@	.30	" "	.60
Earth Work.....			25.00
			<hr/>
			\$95.10

\$45.50

Sidegate.

Sta. 532-31. Width 4 ft. Depth 3 ft. Length 21 ft. 40%.

Lumber 1,007 ft....@	\$25.00	per M	\$25.20
Carpenter Work....@	7.00	" "	7.00
Hauling@	3.00	" "	3.00
Iron@	2.00	" "	2.00
Nails@	.30	" "	.50
Earth Work.....			25.00
			<hr/>
			\$62.70

\$25.00

Sidegate.

Sta. 539-41. Width 12 ft. Depth 66". Length 20 ft. 80%.

Lumber 1,454 ft....@	\$25.00	per M	\$36.30
Carpenter Work....@	7.00	" "	10.50
Hauling@	3.00	" "	4.50
Iron@	2.00	" "	3.00
Nails@	.30	" "	.50
Earth Work.....			25.00
			<hr/>
			\$79.80

\$63.80

1975

Measuring Gate.

Sta. 539-41. Width 4 ft. Depth 3 ft. Length 9 ft. 20%.

Lumber 443 ft....@	\$25.00	per M	\$11.10
Carpenter Work....@	7.00	" "	3.10
Hauling@	3.00	" "	1.30
Iron@	2.00	" "	.80
Nails@	.30	" "	.50
Earth Work.....			25.00
			<hr/>
			\$41.80

\$8.40

Weir.

Sta. 540-54. Width 20 ft. Depth 90". Length 37 ft. 60%.

Lumber 13,807 ft....@	\$25.00	per M	\$345.20	
Carpenter Work....@	7.00	" "	96.60	
Hauling@	3.00	" "	41.40	
Iron@	2.00	" "	27.60	
Nails@	.30	" "	4.20	
Earth Work.....			120.00	
			<hr/>	
			\$635.00	\$391.00

Sidegate.

Sta. 547-03. Width 2 ft. Depth 3 ft. Length 24 ft. 30%.

Lumber 851 ft....@	\$25.00	per M	\$21.30	
Carpenter Work....@	7.00	" "	5.90	
Hauling@	3.00	" "	2.60	
Iron@	2.00	" "	1.70	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$57.00	\$17.10

1976

Sidegate.

Sta. 552-97. Width 54". Depth 6 ft. Length 24 ft. 30%

Lumber 1,844 ft.@	\$25.00	per M	\$46.10	
Carpenter Work ...@	7.00	" "	12.70	
Hauling@	3.00	" "	5.40	
Iron@	2.00	" "	3.60	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$93.20	\$27.90

Sidegate.

Sta. 556-71. Width 2 ft. Depth 30". Length 24 ft. 30%.

Lumber 825 ft....@	\$25.00	per M	\$20.60	
Carpenter Work....@	7.00	" "	5.70	
Hauling@	3.00	" "	2.40	
Iron@	2.00	" "	1.60	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$55.80	\$16.60

Sidegate.

Sta. 560-53.	Width 4 ft.	Depth 3 ft.	Length 21 ft.	30%.
Lumber 1,861 ft....@	\$25.00	per M	\$21.50	
Carpenter Work....@	7.00	" "	6.30	
Hauling@	3.00	" "	2.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$57.80	\$17.40

1977

Drain.

Sta. 561-88.	Width 3 ft.	Depth 2 ft.	Length 80 ft.	30%.
Lumber 688 ft....@	\$25.00	per M	\$17.20	
Carpenter Work....@	7.00	" "	4.90	
Hauling@	3.00	" "	2.10	
Iron@	2.00	" "	1.40	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$51.10	\$15.40

Sidegate.

Sta. 566-17.	Width 54".	Depth 5 ft.	Length 21 ft.	40%.
Lumber 1,338 ft....@	\$25.00	per M	\$33.40	
Carpenter Work....@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$74.50	\$29.80

Sidegate.

Sta. 569-88.	Width 4 ft.	Depth 40".	Length 22 ft.	40%.
Lumber 1,034 ft....@	\$25.00	per M	\$25.80	
Carpenter Work....@	7.00	" "	7.00	
Hauling@	3.00	" "	3.00	
Iron@	2.00	" "	2.00	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$63.30	\$25.30

1978

Sidegate.

Sta. 571-21. Width 12 ft. Depth 90". Length 20 ft. 40%.

Lumber 2,959 ft.	@	\$25.00	per	M	\$74.00
Carpenter Work	@	7.00	"	"	20.30
Hauling	@	3.00	"	"	8.70
Iron	@	2.00	"	"	5.80
Nails	@	.30	"	"	.90
Earth Work					25.00

\$134.70

\$43.90

Sidegate.

Sta. 575-17. Width 66". Depth 4 ft. Length 20 ft. 40%.

Lumber 1,225 ft.	@	\$25.00	per	M	\$30.60
Carpenter Work	@	7.00	"	"	8.40
Hauling	@	3.00	"	"	3.60
Iron	@	2.00	"	"	2.40
Nails	@	.30	"	"	.50
Earth Work					25.00

\$70.50

\$28.20

Sidegate.

Sta. 577-17. Width 4 ft. Depth 40". Length 20 ft. 30%.

Lumber 977 ft.	@	\$25.00	per	M	\$24.40
Hauling	@	3.00	"	"	2.90
Carpenter Work	@	7.00	"	"	6.80
Iron	@	2.00	"	"	1.90
Nails	@	.30	"	"	.50
Earth Work					25.00

\$61.50

\$18.50

1979

Bridge.

Sta. 579-76. Width 12 ft. Length 60 ft. 30%

Lumber 5,859 ft.	@	\$25.00	per	M	\$146.70
Carpenter Work	@	7.00	"	"	41.30
Hauling	@	3.00	"	"	17.70
Iron	@	2.00	"	"	11.80
Nails	@	.30	"	"	1.80
Earth Work					25.00

\$244.30

\$73.30

Sidegate.

Sta. 582-52. Width 8 ft. Depth 54". Length 24 ft. 30%

Lumber 2,187 ft.	@	\$25.00	per M	\$54.70	
Carpenter Work	@	7.00	" "	15.40	
Hauling	@	3.00	" "	6.60	
Iron	@	2.00	" "	4.40	
Nails	@	.30	" "	.60	
Earth Work				25.00	
				<u>\$106.70</u>	\$32.00

Weir Wasteway.

Sta. —. Width 18 ft. Depth 90". Length 50 ft. 40%.

Lumber 16,000 ft. . .	@	\$25.00	per M	\$400.00	
Carpenter Work	@	7.00	" "	112.00	
Hauling	@	3.00	" "	48.00	
Iron	@	2.00	" "	32.00	
Nails	@	.30	" "	4.80	
Earth Work				120.00	
				<u>\$716.80</u>	\$286.70

1980

Sidegate.

Sta. 588-27. Width 4 ft. Depth 4 ft. Length 19 ft.

Lumber 1,114 ft.	@	\$25.00	per M	\$37.90	
Carpenter Work	@	7.00	" "	7.70	
Hauling	@	3.00	" "	3.30	
Iron	@	2.00	" "	2.20	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<u>\$76.60</u>	\$23.00

Sidegate.

Sta. 592-84. Width 4 ft. Depth 7 ft. Length 20 ft. 30%

Lumber 895 ft.	@	\$25.00	per M	\$22.40	
Carpenter Work	@	7.00	" "	5.90	
Hauling	@	3.00	" "	2.70	
Iron	@	2.00	" "	1.80	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<u>\$58.30</u>	\$17.40

Bridge & Weir.

Sta. 596-92. Width 20 ft. Depth 5 ft. Length 32 ft. 30%.

Lumber 7,200 ft.	@	\$25.00	per	M	\$255.00
Carpenter Work	@	7.00	"	"	71.40
Hauling	@	3.00	"	"	30.60
Iron	@	2.00	"	"	20.40
Nails	@	.30	"	"	3.10
Earth Work					120.00

\$550.00

\$150.10

1981

Bridge.

Sta. 596-92. Part of Weir. Width 16 ft. 30%

Lumber 2,680 ft.	@	\$25.00	per	M	\$67.00
Carpenter Work	@	7.00	"	"	18.90
Hauling	@	3.00	"	"	8.10
Iron	@	2.00	"	"	5.40
Nails	@	.30	"	"	.80

\$100.20

\$30.00

Sidegate.

Sta. 602-49. Width 2 ft. Depth 4 ft. Length 19 ft. 40%.

Lumber 888 ft.	@	\$25.00	per	M	\$22.20
Carpenter Work	@	7.00	"	"	6.20
Hauling	@	3.00	"	"	2.60
Iron	@	2.00	"	"	1.80
Nails	@	.30	"	"	.50
Earth Work					25.00

\$58.30

\$23.30

Sidegate.

Sta. 604-34. Width 2 ft. Depth 3 ft. Length 19 ft. 30%.

Lumber 693 ft.	@	\$25.00	per	M	\$17.40
Carpenter Work	@	7.00	"	"	4.90
Hauling	@	3.00	"	"	2.10
Iron	@	2.00	"	"	1.40
Nails	@	.30	"	"	.50
Earth Work					25.00

\$51.30

\$15.40

1416 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

1982

Sidegate.

Sta. 610-23.	Width 2 ft.	Depth 3 ft.	Length 19 ft.	30%.
Same as Station 604-34.				\$51.30 \$15.40

Drain.

Sta. 610-65.	Width 4 ft.	Depth 4 ft.	Length 60 ft.	30%.
Lumber 3,206 ft.	@	\$25.00 per M	\$80.20	
Carpenter Work	@	7.00 " "	22.40	
Hauling	@	3.00 " "	9.60	
Iron	@	2.00 " "	6.40	
Nails	@	.30 " "	.50	
Earth Work			25.00	
				<u>\$144.10</u> \$43.20

Sidegate.

Sta. 613-28.	Width 50".	Depth 4 ft.	Length 19 ft.	40%.
Lumber 1, 215 ft.	@	\$25.00 per M	\$30.40	
Carpenter Work	@	7.00 " "	8.40	
Hauling	@	3.00 " "	3.60	
Iron	@	2.00 " "	2.40	
Nails	@	.30 " "	.50	
Earth Work			25.00	
				<u>\$70.30</u> \$28.10

Sidegate.

Sta. 615-72.	Width 4 ft.	Depth 3 ft.	Length 20 ft.	20%.
Lumber 872 ft.	@	\$25.00 per M	\$21.80	
Carpenter Work	@	7.00 " "	6.30	
Hauling	@	3.00 " "	2.70	
Iron	@	2.00 " "	1.80	
Nails	@	.30 " "	.50	
Earth Work			25.00	
				<u>\$58.10</u> \$11.62

1983

Sidegate.

Sta. 620-82.	Width 50".	Depth 54".	Length 19 ft.	30%.
Lumber 1,157 ft.	@	\$25.00 per M	\$38.90	
Carpenter Work	@	7.00 " "	8.20	
Hauling	@	3.00 " "	3.60	
Iron	@	2.00 " "	2.40	
Nails	@	.30 " "	.50	
Earth Work			25.00	
				<u>\$88.60</u> \$26.60

Sidegate.

Sta. 629-27. Width 4 ft. Depth 43". Length 19 ft. 20%.

Lumber 1,085 ft.	@	\$25.00	per	M	\$25.30
Carpenter Work	@	7.00	"	"	7.70
Hauling	@	3.00	"	"	3.30
Iron	@	2.00	"	"	2.20
Nails	@	.30	"	"	.50
Earth Work					25.00

\$64.00

\$12.80

Sidegate.

Sta. 630-77. Width 4 ft. Depth 3 ft. Length 20 ft. 20%.

Lumber 777 ft.	@	\$25.00	per	M	\$19.40
Carpenter Work	@	7.00	"	"	5.40
Hauling	@	3.00	"	"	2.20
Iron	@	2.00	"	"	1.60
Nails	@	.30	"	"	.50
Earth Work					25.00

\$54.10

\$10.80

1984

Sidegate.

Sta. 636-37. Width 2 ft. Depth 30". Length 19 ft. 20%.

Lumber 678 ft.	@	\$25.00	per	M	\$17.00
Carpenter Work	@	7.00	"	"	4.70
Hauling	@	3.00	"	"	2.00
Iron	@	2.00	"	"	1.30
Nails	@	.30	"	"	.50
Earth Work					25.00

\$40.50

\$8.10

Sidegate.

Sta. 639-59. Width 2 ft. Depth 4 ft. Length 19 ft. 20%.

Lumber 816 ft.	@	\$25.00	per	M	\$20.40
Carpenter Work	@	7.00	"	"	5.70
Hauling	@	3.00	"	"	2.50
Iron	@	2.00	"	"	1.60
Nails	@	.30	"	"	.50
Earth Work					25.00

\$55.70

\$11.40

Sidegate.

Sta. 645-71. Width 2 ft. Depth 4 ft. Length 19 ft. 30%.

Lumber 826 ft.	@	\$25.00	per	M	\$20.60
Carpenter Work	@	7.00	"	"	5.70
Hauling	@	3.00	"	"	2.50
Iron	@	2.00	"	"	1.60
Nails	@	.30	"	"	.50
Earth Work					25.00

\$55.90

\$15.60

1985

Sidegate.

Sta. 648-62. Width 2 ft. Depth 42". Length 19 ft. 30%.

Lumber 815 ft.	@	\$25.00	per	M	\$20.40
Carpenter Work	@	7.00	"	"	5.60
Hauling	@	3.00	"	"	2.40
Iron	@	2.00	"	"	1.60
Nails	@	.30	"	"	.50
Earth Work					25.00

\$65.50

\$19.60

Sidegate.

Sta. 652-06. Width 8 ft. Depth 4 ft. 8". Length 19 ft. 20%.

Lumber 1,714 ft.	@	\$25.00	per	M	\$42.80
Carpenter Work	@	7.00	"	"	11.90
Hauling	@	3.00	"	"	5.10
Iron	@	2.00	"	"	3.00
Nails	@	.30	"	"	.50
Earth Work					25.00

\$88.30

\$17.70

Sidegate.

Sta. 652-71. Width 2 ft. Depth 3 ft. Length 19 ft. 20%.

Lumber 714 ft.	@	\$25.00	per	M	\$17.80
Carpenter Work	@	7.00	"	"	4.90
Hauling	@	3.00	"	"	2.10
Iron	@	2.00	"	"	1.40
Nails	@	.30	"	"	.50
Earth Work					25.00

\$51.70

\$10.30

1986

Weir.

Sta. 653-11. Width 18 ft. Depth 60". Length 40 ft. 30%

Same as Station 17-09. \$586.30 \$175.90

Sidegate.

Sta. 653-16. Width 2 ft. Depth 3 ft. Length 19 ft. 20%.

Lumber 612 ft.	@	\$25.00	per	M	\$15.30
Carpenter Work	@	7.00	"	"	4.30
Hauling	@	3.00	"	"	1.90
Iron	@	2.00	"	"	1.20
Nails	@	.30	"	"	.50
Earth Work					25.00

\$48.20

\$9.60

Sidegate.

Sta. 665-12. Width 2 ft. Depth 3 ft. Length 19 ft. 30%.

Same as Station 663-15. \$48.20 \$14.40

Bridge.

Sta. 665-66. Width 18 ft. Length 32 ft. 30%

Lumber 3,638 ft.	@	\$25.00	per	M	\$90.90
Carpenter Work	@	7.00	"	"	25.20
Hauling	@	3.00	"	"	10.80
Iron	@	2.00	"	"	7.20
Nails	@	.30	"	"	1.10
Earth Work					25.00

\$160.20

\$48.00

1987

Sidegate.

Sta. 666-77. Width 2 ft. Depth 3 ft. Length 19 ft. 20%.

Lumber 612 ft.	@	\$25.00	per	M	\$15.30
Carpenter Work	@	7.00	"	"	4.30
Hauling	@	3.00	"	"	1.80
Iron	@	2.00	"	"	1.20
Nails	@	.30	"	"	.50
Earth Work					25.00

\$48.10

\$9.60

Sidegate.

Sta. 669-84. Width 8 ft. Depth 40". Length 19 ft. 30%.

Lumber 1,474 ft....@	\$25.00 per M	\$36.80	
Carpenter Work....@	7.00 " "	10.50	
Hauling@	3.00 " "	4.50	
Iron@	2.00 " "	3.00	
Nails@	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$80.30	\$24.10

Sidegate.

Sta. 670-43. Width 8 ft. Depth 42". Length 19 ft. 20%.

Same as Station 669-84..... \$80.30 \$16.00

Weir.

Sta. 671-09. Width 18 ft. Depth 5 ft. Length 40 ft. 30%.

Same as Station 17-09..... \$586.30 \$175.90

1988

Sidegate.

Sta. 687-22. Width 2 ft. Depth 42". Length 19 ft. 20%.

Lumber 912 ft....@	\$25.00 per M	\$22.80	
Carpenter Work....@	7.00 " "	6.40	
Hauling@	3.00 " "	2.70	
Iron@	2.00 " "	1.80	
Nails@	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$59.20	\$11.80

Sidegate.

Sta. 678-64. Width 4 ft. Depth 30". Length 19 ft. 30%.

Lumber 981 ft....@	\$25.00 per M	\$24.50	
Carpenter Work....@	7.00 " "	6.90	
Hauling@	3.00 " "	2.90	
Iron@	2.00 " "	1.90	
Nails@	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$61.70	\$18.50

Sidegate, New Lateral.

Sta. 679-36. Width 20 ft. Depth 54". Length 20 ft. New.

Lumber, 3,482 ft. . . @	\$25.00	per M	\$87.00
Carpenter Work. . . @	7.00	" "	24.50
Hauling @	3.00	" "	10.50
Iron @	2.00	" "	7.00
Nails @	.30	" "	1.10
Earth Work.			25.00

\$155.10

\$—

1989

Sidegate.

Sta. 680-24. Width 8 ft. Depth 4 ft. Length 19 ft. 20%.

Lumber 2,005 ft. . . @	\$25.00	per M	\$62.60
Carpenter Work. . . @	7.00	" "	17.50
Hauling @	3.00	" "	7.50
Iron @	2.00	" "	5.00
Nails @	.30	" "	.70
Earth Work.			25.00

\$118.30

\$23.70

Weir.

Sta. 680-90. Width 18 ft. Depth 5 ft. Length 22 ft. 30%.

Lumber 8,600 ft. . . @	\$25.00	per M	\$215.00
Carpenter Work. . . @	7.00	" "	60.20
Hauling @	3.00	" "	25.80
Iron @	2.00	" "	17.20
Nails @	.30	" "	2.60
Earth Work.			120.00

\$440.80

\$132.24

Sidegate.

Sta. 684-74. Width 8 ft. Depth 4 ft. Length 18 ft. 30%.

Lumber 1,607 ft. . . @	\$25.00	per M	\$40.10
Carpenter Work. . . @	7.00	" "	11.20
Hauling @	3.00	" "	4.80
Iron @	2.00	" "	3.20
Nails @	.30	" "	.50
Earth Work.			25.00

\$84.80

\$25.40

1990

Sidegate.

Sta. 685-91. Width 4 ft. Depth 4 ft. Length 20 ft. 20%.

Lumber 1,077 ft.@	\$25.00 per M	\$26.90	
Carpenter Work.@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work.		25.00	
		<hr/>	
		\$65.60	\$13.10

Sidegate.

Sta. 691-70. Width 8 ft. Depth 40". Length 19 ft. 40%.

Lumber 1,548.@	\$25.00 per M	\$38.70	
Carpenter Work.@	7.00 " "	13.20	
Hauling@	3.00 " "	4.80	
Iron@	2.00 " "	3.20	
Nails@	.30 " "	.50	
Earth Work.		25.00	
		<hr/>	
		\$85.40	\$34.10

Sidegate.

Sta. 688-77. Width 8 ft. Depth 4 ft. Length 19 ft. 30%.

Lumber 1,670 ft.@	\$25.00 per M	\$41.80	
Carpenter Work.@	7.00 " "	11.90	
Hauling@	3.00 " "	5.10	
Iron@	2.00 " "	2.40	
Nails@	.30 " "	.60	
Earth Work.		25.00	
		<hr/>	
		\$86.80	\$26.00

1991

Sidegate.

Sta. 697-11. Width 4 ft. Depth 4 ft. Length 20 ft. 20%.

Lumber 1,029 ft.@	\$25.00 per M	\$25.70	
Carpenter Work.@	7.00 " "	7.00	
Hauling@	3.00 " "	3.00	
Iron@	2.00 " "	2.00	
Nails@	.30 " "	.50	
Earth Work.		25.00	
		<hr/>	
		\$63.20	\$12.50

Sidegate.

Sta. 688-14. Width 2 ft. Depth 4 ft. Length 20 ft. 20%.

Lumber 809 ft....@	\$25.00 per M	\$22.50
Carpenter Work....@	7.00 " "	6.30
Hauling@	3.00 " "	2.70
Iron@	2.00 " "	1.80
Nails@	.30 " "	.50
Earth Work.....		25.00

\$58.80

\$11.70

Weir.

Sta. 698-90. Width 18 ft. Depth 60". Length 40 ft. 30%

Lumber 12,666 ft..@	\$25.00 per M	\$316.70
Carpenter Work....@	7.00 " "	88.90
Hauling@	3.00 " "	38.10
Iron@	2.00 " "	25.40
Nails@	.30 " "	3.90
Earth Work		120.00

\$583.00

\$178.00

1992

Sidegate.

Sta. 704-42. Width 2 ft. Depth 3 ft. Length 20 ft. 10%

Lumber 707 ft....@	\$25.00 per M	\$17.60
Carpenter Work ..@	7.00 " "	4.90
Hauling@	3.00 " "	2.10
Iron@	2.00 " "	1.40
Nails@	.30 " "	.50
Earth Work		25.00

\$51.50

\$5.10

Sidegate.

Sta. 708-96. Width 8 ft. Depth 4 ft. Length 20 ft. 30%

Lumber 1,665 ft..@	\$25.00 per M	\$41.60
Carpenter Work ..@	7.00 " "	11.90
Hauling@	3.00 " "	5.10
Iron@	2.00 " "	3.40
Nails@	.30 " "	.50
Earth Work		25.00

\$87.50

\$26.20

Sidegate.

Sta. 711-93. Width 2 ft. Depth 40". Length 19 ft. 20%

Lumber 741 ft....@	\$25.00 per M	\$18.50	
Carpenter Work ..@	7.00 " "	5.20	
Hauling@	3.00 " "	2.20	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$52.80	\$10.50

1993

Sidegate.

Sta. 713-35. Width 2 ft. Depth 3 ft. Length 19 ft. 20%

Lumber 692 ft....@	\$25.00 per M	\$17.30	
Carpenter Work ..@	7.00 " "	4.80	
Hauling@	3.00 " "	2.00	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$51.00	\$10.20

Sidegate.

Sta. 719-16. Width 2 ft. Depth 3 ft. Length 20 ft. 20%

Lumber 705 ft....@	\$25.00 per M	\$17.60	
Carpenter Work ..@	7.00 " "	4.90	
Hauling@	3.00 " "	2.10	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$51.50	\$10.30

Bridge.

Sta. 722-10. Width 16 ft. Length 38 ft. 30%

Lumber 3,694 ft...@	\$25.00 per M	\$92.40	
Carpenter Work ..@	7.00 " "	25.90	
Hauling@	3.00 " "	11.10	
Iron@	2.00 " "	7.40	
Nails@	.30 " "	1.10	
Earth Work		25.00	
		<hr/>	
		\$162.90	\$48.90

1994

Sidegate.

Sta. 724-16. Width 3 ft. Depth 3 ft. Length 20 ft. 20%

Lumber 651 ft....@	\$25.00 per M	\$16.20
Carpenter Work ..@	7.00 " "	4.50
Hauling@	3.00 " "	1.90
Iron@	2.00 " "	1.30
Nails@	.30 " "	.50
Earth Work		25.00

\$49.40

\$9.90

Sidegate.

Sta. 725-59. Width 4 ft. Depth 46". Length 29 ft. 20%

Lumber 939 ft....@	\$25.00 per M	\$23.50
Carpenter Work ...@	7.00 " "	6.50
Hauling@	3.00 " "	2.80
Iron@	2.00 " "	1.80
Nails@	.30 " "	.50
Earth Work		25.00

\$60.10

\$12.00

Sidegate.

Sta. 725-75. Width 6 ft. Depth 3 ft. Length 20 ft. 20%

Lumber 1,322 ft...@	\$25.00 per M	\$33.00
Carpenter Work ..@	7.00 " "	9.10
Hauling@	3.00 " "	3.90
Iron@	2.00 " "	2.60
Nails@	.30 " "	.50
Earth Work		25.00

\$74.10

\$14.80

1995

Weir.

Sta. 726-49. Width 18 ft. Depth 52". Length 32 ft. 30%

Lumber 10,000 ft...@	\$25.00 per M	\$250.00
Carpenter Work ..@	7.00 " "	70.00
Hauling@	3.00 " "	30.00
Iron@	2.00 " "	20.00
Nails@	.30 " "	3.00
Earth Work		120.00

\$493.00

\$148.00

91-722

Sidegate.

Sta. 732-93. Width 4 ft. Depth 3 ft. Length 20 ft. 30%

Lumber 841 ft.....@	\$25.00 per M	\$21.00	
Carpenter Work ..@	7.00 " "	5.90	
Hauling@	3.00 " "	2.60	
Iron@	2.00 " "	1.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$56.80	\$17.00

Sidegate.

Sta. 736-44. Width 4 ft. Depth 3 ft. Length 20 ft. 30%

Lumber 829 ft.....@	\$25.00 per M	\$20.70	
Carpenter Work ..@	7.00 " "	6.30	
Hauling@	3.00 " "	2.70	
Iron@	2.00 " "	1.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$57.00	\$17.10

1996

Sidegate.

Sta. 738-86. Width 4 ft. Depth 3 ft. Length 21 ft. 30%

Lumber 861 ft.....@	\$25.00 per M	\$21.50	
Carpenter Work ..@	7.00 " "	6.30	
Hauling@	3.00 " "	2.70	
Iron@	2.00 " "	1.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$55.80	\$16.70

Sidegate.

Sta. 743-26. Width 4 ft. Depth 3 ft. Length 20 ft. 30%

Lumber 905 ft.....@	\$25.00 per M	\$22.60	
Carpenter Work ..@	7.00 " "	6.30	
Hauling@	3.00 " "	2.70	
Iron@	2.00 " "	1.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$58.90	\$17.70

Sidegate.

Sta. 741-27. Width 4 ft. Depth 4 ft. Length 20 ft. 20%

Lumber 1,109 ft...@	\$25.00 per M	\$27.70	
Carpenter Work ..@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$66.40	\$13.30

1997

Drain.

Sta. 747-38. Width 2 ft. Depth 4 ft. Length 60 ft. 50%

Lumber 2,292 ft...@	\$25.00 per M	\$57.30	
Carpenter Work ..@	7.00 " "	16.10	
Hauling@	3.00 " "	6.90	
Iron@	2.00 " "	4.60	
Nails@	.30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$110.60	\$55.30

Sidegate.

Sta. 751-37. Width 24". Depth 3 ft. Length 20 ft. 20%

Lumber 690 ft....@	\$25.00 per M	\$17.50	
Carpenter Work ..@	7.00 " "	4.90	
Hauling@	3.00 " "	2.10	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$51.40	\$10.30

Sidegate.

Sta. 752-30. Width 4 ft. Depth 4 ft. Length 20 ft. 20%

Lumber 1,069 ---@	\$25.00 per M	\$26.80	
Carpenter Work ..@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$65.50	\$13.10

1998

Sidegate.

Sta. 753-37. Width 3 ft. Depth 3 ft. Length 20 ft. 30%

Lumber 748 ft.@	\$25.00	per M	\$18.70
Carpenter Work ...@	7.00	" "	5.20
Hauling@	3.00	" "	2.20
Iron@	2.00	" "	1.50
Nails@	.30	" "	.50
Earth Work			25.00

\$53.10

\$15.90

Bridge & Gate.

Sta. 756-35. Width 16 ft. Depth 64". Length 20 ft. 40%

Lumber 10,058 ft...@	\$25.00	per M	\$251.50
Carpenter Work ...@	7.00	" "	70.00
Hauling@	3.00	" "	30.00
Iron@	2.00	" "	20.00
Nails@	.30	" "	3.00
Earth Work			25.00

\$399.50

\$159.80

Bridge.

Sta. 761-81.

Width 16 ft.

Length 16 ft.

Lumber 2,064 ft...@	\$25.00	per M	\$51.60
Carpenter Work ...@	7.00	" "	14.70
Hauling@	3.00	" "	6.30
Iron@	2.00	" "	4.20
Nails@	.30	" "	.60
Earth Work			25.00

\$102.40

\$51.20

1999

Bridge & Gate.

Sta. 767-34 Width 12 ft. Length 20 ft. Depth 6 ft. 40%

Lumber 2,684 ft. ..@	\$25.00	per M	\$67.10
Carpenter Work ...@	7.00	" "	18.90
Hauling@	3.00	" "	8.10
Iron@	2.00	" "	5.40
Nails@	.30	" "	.80
Earth Work			25.00

\$125.30

\$51.10

Merced County.

Total Cost of Structures	\$12,885.70
Total Depreciation	4,405.80
Present Value	<u>\$8,479.90</u>

2000

Main Canal, Merced Co.

Sidegate.

Sta. 1132-73. Width 72". Depth 72". Length 26 ft. 40%

Lumber 1,969 ft....at \$25.00 per M	\$49.20	
Carpenter Work....at 7.00 " "	14.00	
Hauling .....at 3.00 " "	6.00	
Iron .....at 2.00 " "	4.00	
Nails .....at .30 " "	.60	
Earth Work	25.00	
	<u>\$98.80</u>	\$39.50

Gate in Center Bank.

Sta. 1152-26. Obsolete 100%

Sidegate.

Sta. 1153-28. Width 72". Depth 48". Length 24 ft. 30%

Lumber 1,469 ft....at \$25.00 per M	\$36.80	
Carpenter Work ....at 7.00 " "	10.50	
Hauling .....at 3.00 " "	4.50	
Iron .....at 2.00 " "	3.00	
Nails .....at .30 " "	.50	
Earth Work	25.00	
	<u>\$80.30</u>	\$24.10

Sidegate.

Sta. 1216-54. Width 96". Depth 66". Length 18 ft. 50%.

Lumber 1,857 ft....at \$25.00 per M	\$46.40	
Carpenter Work ....at 7.00 " "	13.30	
Hauling .....at 3.00 " "	5.70	
Iron .....at 2.00 " "	3.80	
Nails .....at .30 " "	.60	
Earth Work	25.00	
	<u>\$94.80</u>	\$47.40

2001

Weir.

Sta. 1218-47. Width 16 ft. Depth 84". Length 40 ft. 80%.

Lumber 12,648 ft....at	\$25.00 per M	\$316.20	
Carpenter Work....at	7.00 " "	38.50	
Hauling .....at	3.00 " "	37.90	
Iron .....at	2.00 " "	25.30	
Nails .....at	.30 " "	3.80	
Earth Work.....		120.00	
		<u>\$591.70</u>	\$473.40

Drainage Gate.

Sta. 1276-26. Width 12 ft. Depth 72". Length 35 ft. 60%.

Lumber 2,812 ft....at	\$25.00 per M	\$70.30	
Carpenter Work....at	7.00 " "	19.60	
Hauling .....at	3.00 " "	8.40	
Iron .....at	2.00 " "	5.80	
Nails .....at	.30 " "	.80	
Earth Work.....		25.00	
		<u>\$129.70</u>	\$77.80

2002

Sidegate.

Sta. 1335-34. Width 10 ft. 6". Depth 4 ft. 4". Length 36 ft.

Depr. 90%.

Lumber 1,972 ft....at	\$25.00 per M	\$49.30	
Carpenter Work....at	7.00 " "	14.00	
Hauling .....at	3.00 " "	6.00	
Iron .....at	2.00 " "	4.00	
Nails .....at	.30 " "	.60	
Earth Work.....		25.00	
		<u>98.90</u>	\$89.00

Sidegate.

Sta. 1334-63. Width 12 ft. Depth 24". Length 20 ft. 20%.
Depr.

Lumber 292 ft....at	\$25.00 per M	\$47.30	
Carpenter Work....at	7.00 " "	2.10	
Hauling .....at	3.00 " "	.90	
Iron .....at	2.00 " "	.60	
Nails .....at	.30 " "	.50	
Earth Work.....		25.00	
		<u>\$36.40</u>	\$7.30

Weir.

Sta. 1335-78. Width 24 ft. Depth 8 ft. Length 50 ft. 90%.
Depr.

Lumber 16,500 ft...at	\$25.00	per M	\$412.50
Carpenter Work....at	7.00	" "	115.50
Hauling .....at	3.00	" "	49.50
Iron .....at	2.00	" "	33.00
Nails .....at	.30	" "	4.90
Earth Work.....			120.00

\$735.40 \$651.90

2003 Spillway.

Sta. 1335-85. Width 16 ft. Depth 12 ft. Length 36 ft. 70%.

Lumber 15,500 ft...at	\$25.00	per M	\$387.50
Carpenter Work....at	7.00	" "	108.50
Hauling .....at	3.00	" "	46.50
Iron .....at	2.00	" "	31.00
Nails .....at	.30	" "	4.60
Earth Work.....			120.00

698.10 \$488.70

Weir.

Sta. 1336-21. Width 20 ft. Depth 8 ft. Length 46 ft. 90%.

Lumber 13,500 ft...at	\$25.00	per M	\$337.50
Carpenter Work....at	7.00	" "	94.50
Hauling .....at	3.00	" "	40.50
Iron .....at	2.00	" "	27.00
Nails .....at	.30	" "	4.10
Earth Work.....			120.00

623.00 \$560.80

Weir.

Sta. 1336-57. Width 16 ft. Depth 76". Length 37, ft. 70%.

Lumber 12,600 ft...at	\$25.00	per M	\$315.00
Carpenter Work....at	7.00	" "	88.20
Hauling .....at	3.00	" "	37.80
Iron .....at	2.00	" "	25.20
Nails .....at	.30	" "	3.80
Earth Work.....			120.00

\$590.00 \$413.00

2004

Sidegate.

Sta. 1370-43 Width 33". Depth 42". Length 22 ft. 60%

Lumber 731 ft. at	\$25.00	per M	\$18.20
Carpenter Work at	7.00	" "	5.10
Hauling at	3.00	" "	2.20
Iron at	2.00	" "	1.40
Nails at	.30	" "	.50
Earth Work			25.00

\$52.40

\$31.40

Sidegate.

Sta. 1418-85. Width 42". Depth 48". Length 24 ft. 60%

Lumber 1,136 ft. at	\$25.00	per M	\$28.40
Carpenter Work at	7.00	" "	7.70
Hauling at	3.00	" "	3.30
Iron at	2.00	" "	2.20
Nails at	.30	" "	.50
Earth Work			25.00

\$67.50

\$40.20

Sidegate.

Sta. 1434-89. Width 40". Depth 52". Length 20 ft. 60%

Lumber 962 ft. at	\$25.00	per M	\$24.10
Carpenter Work at	7.00	" "	6.70
Hauling at	3.00	" "	2.90
Iron at	2.00	" "	1.90
Nails at	.30	" "	.50
Earth Work			25.00

\$61.10

\$36.60

2005

Sidegate.

Sta. 1452-58. Width 42". Depth 42". Length 25 ft. 60%

Lumber 909 ft. at	\$25.00	per M	\$22.70
Carpenter Work at	7.00	" "	6.30
Hauling at	3.00	" "	2.70
Iron at	2.00	" "	1.80
Nails at	.30	" "	.50
Earth Work			25.00

\$59.00

\$35.40

Sidegate.

Sta. 1494-24. Width 40". Depth 22". Length 26 ft. 60%

Lumber 756 ft. at	\$25.00	per M	\$18.90	
Carpenter Work at	7.00	" "	5.60	
Hauling at	3.90	" "	2.10	
Iron at	2.00	" "	1.40	
Nails at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$53.50	\$32.10

Bridge.

Sta. 1507. Width 16 ft. Depth —. Length 135 ft. 90%

Lumber 4,714 ft. at	\$25.00	per M	\$117.80	
Carpenter Work at	7.00	" "	32.90	
Hauling at	3.00	" "	14.10	
Iron at	2.00	" "	9.40	
Nails at	.30	" "	1.40	
Earth Work			25.00	
			<hr/>	
			\$200.60	\$180.50

2006

Bridge.

Sta. 1507. Width 16 ft. Length 16 ft. 60%

Lumber 1,338 ft. at	\$25.00	per M	\$33.40	
Carpenter Work at	7.00	" "	9.10	
Hauling at	3.00	" "	3.90	
Iron at	2.00	" "	2.60	
Nails at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$74.50	\$44.70

Sidegate.

Sta. 1511. Width 48". Depth 44". Length 26 ft. 60%

Lumber 1,281 ft. at	\$25.00	per M	\$32.50	
Carpenter Work at	7.00	" "	9.10	
Hauling at	3.00	" "	3.90	
Iron at	2.00	" "	2.60	
Nails at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$73.60	\$44.20

Sidegate.

Sta. 1570-80. Width 85". Depth 58". Length 26 ft. 50%

Lumber 2,072 ft....at	\$25.00	per M	\$51.80
Carpenter Work....at	7.00	" "	14.70
Hauling.....at	3.00	" "	6.30
Iron.....at	2.00	" "	4.20
Nails.....at	.30	" "	.60
Earth Work.....			25.00

\$102.60

\$51.30

2007

Sidegate.

Sta. 1530-11. Width 30". Depth 36". Length 23 ft. 60%

Lumber 655 ft....at	\$25.00	per M	\$16.40
Carpenter Work....at	7.00	" "	4.90
Hauling.....at	3.00	" "	2.10
Iron.....at	2.00	" "	1.40
Nails.....at	.30	" "	.50
Earth Work.....			25.00

\$50.30

\$30.20

Sidegate.

Sta. 1625-22. Width 42". Depth 54". Length 26 ft. 80%

Lumber 1,143 ft....at	\$25.00	per M	\$28.60
Carpenter Work....at	7.00	" "	7.70
Hauling.....at	3.00	" "	3.30
Iron.....at	2.00	" "	2.20
Nails.....at	.30	" "	.50
Earth Work.....			25.00

\$67.30

\$53.80

Sidegate.

Sta. 1633-90 Width 126". Depth —. Length 5—. 100%

Lumber 2,000 ft....at	\$25.00	per M	\$50.00
Carpenter Work....at	7.00	" "	14.00
Hauling.....at	3.00	" "	6.00
Iron.....at	2.00	" "	4.00
Nails.....at	.30	" "	.60
Earth Work.....			25.00

\$99.60

\$99.60

2008

Bridge (Side-bridge).

Sta. 1634-42.	Width 16 ft.	Length 16 ft.	40%
Lumber 13,038 ft...at	\$25.00 per M	\$33.40	
Carpenter Work...at	7.00 " "	9.10	
Hauling .....at	3.00 " "	3.90	
Iron .....at	2.00 " "	2.60	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<hr/> \$74.50	\$29.80

Bridge.

Sta. 1634-52.	Width 14 ft.	Length 53 ft.	60%
Lumber 3,961 ft...at	\$25.00 per M	\$99.00	
Carpenter Work...at	7.00 " "	28.00	
Hauling .....at	3.00 " "	12.00	
Iron .....at	2.00 " "	8.00	
Nails .....at	.30 " "	1.20	
Earth Work		25.00	
		<hr/> \$173.20	\$103.90

Bridge.

Sta. 1634-52.	Width 14 ft.	Length 56 ft.	
Lumber 4,186 ft...at	\$25.00 per M	\$104.60	
Carpenter Work...at	7.00 " "	29.40	
Hauling .....at	3.00 " "	12.60	
Iron .....at	2.00 " "	8.40	
Nails .....at	.30 " "	1.30	
Earth Work		25.00	
		<hr/> \$181.00	\$108.80

2009

Sidegate.

Sta. 1646-07.	Width 60".	Depth 60".	Length 34 ft.	80%
Lumber 2,191 ft...at	\$25.00 per M		\$54.70	
Carpenter Work...at	7.00 " "		15.40	
Hauling .....at	3.00 " "		6.60	
Iron .....at	2.00 " "		4.40	
Nails .....at	.30 " "		.70	
Earth Work			25.00	
			<hr/> \$106.80	\$84.80

Sidegate.

Sta. 1685.	Width 41".	Depth 42".	Length 24 ft.	80%
Lumber 826 ft.....at	\$25.00	per M	\$20.60	
Carpenter Work ...at	7.00	" "	5.60	
Hauling .....at	3.00	" "	2.40	
Iron .....at	2.00	" "	1.60	
Nails .....at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$55.70	\$44.60

Sidegate.

Sta. 1688-30.	Width 9 ft.	Length 5—	100%
Lumber 2,200 ft....at	\$25.00	per M	\$55.00
Carpenter Work ...at	7.00	" "	15.40
Hauling .....at	3.00	" "	6.60
Iron .....at	2.00	" "	4.40
Nails .....at	.30	" "	.70
Earth Work			25.00
			<hr/>
			\$107.10
			\$107.10

2010

Sidegate (Drain).

Sta. 1693-?	Width 9 ft.	Depth —.	Length 5-.	100%
Lumber 2,200 ft....at	\$25.00	per M	\$55.00	
Carpenter Work ...at	7.00	" "	15.40	
Hauling .....at	3.00	" "	6.60	
Iron .....at	2.00	" "	4.40	
Nails .....at	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$107.10	\$107.10

Sidegate.

Sta. 1702-70.	Width 68".	Depth 52".	Length 27 ft.	20%
Lumber 1,771 ft....at	\$25.00	per M	\$44.30	
Carpenter Work ...at	7.00	" "	12.60	
Hauling .....at	3.00	" "	5.40	
Iron .....at	2.00	" "	3.60	
Nails .....at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$91.40	\$18.30

Bridge, Left.

Sta. 1703-55.	Width 16 ft.	Length 58 ft.	60%
Lumber 4,857 ft....at	\$25.00 per M	\$121.40	
Carpenter Work ...at	7.70 " "	33.60	
Hauling .....at	3.00 " "	14.40	
Iron .....at	2.00 " "	9.60	
Nails .....at	.30 " "	1.40	
Earth Work		25.00	
		<u>\$205.40</u>	\$164.30

2011 Bridge (Right).

Sta. 1703-55.	Width 18 ft.	Length 60 ft.	60%
Lumber 7,415 ft....at	\$25.00 per M	\$185.40	
Carpenter Work ...at	7.00 " "	51.80	
Hauling .....at	3.00 " "	22.20	
Iron .....at	2.00 " "	14.80	
Nails .....at	.30 " "	2.20	
Earth Work		25.00	
		<u>\$301.40</u>	\$280.80

Bridge.

Sta. 1703-55.	Width 18 ft.	Length 16 ft.	60%
Lumber 1,632 ft....at	\$25.00 per M	\$40.80	
Carpenter Work ...at	7.00 " "	11.20	
Hauling .....at	3.00 " "	4.80	
Iron .....at	2.00 " "	3.20	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<u>\$85.50</u>	\$51.30

Gate and Center Bank.

Sta. 1707-07.	Width 66".	Depth 90".	Length 33 ft.	100%
Lumber 1,901 ft....at	\$25.00 per M	\$57.50		
Carpenter Work ...at	7.00 " "	13.30		
Hauling .....at	3.00 " "	5.70		
Iron .....at	2.00 " "	3.80	Obsolete	
Nails .....at	.30 " "	.60		
Earth Work		25.00		
		<u>\$95.90</u>		\$95.90

2012

Sidegate.

Sta. 1707-41. Width 60". Depth 60". Length 28 ft. 50%

Lumber 1,693 ft....at	\$25.00	per M	\$42.30
Carpenter Work ...at	7.00	" "	11.90
Hauling .....at	3.00	" "	5.10
Iron .....at	2.00	" "	3.40
Nails .....at	.30	" "	.50
Earth Work			25.00

\$88.20

\$44.10

Sidegate.

Sta. 1707-49. Width 60". Depth 66". Length 28 ft. 50%

Lumber 907 ft.....at	\$25.00	per M	\$22.50
Carpenter Work ...at	7.00	" "	6.30
Hauling .....at	3.00	" "	2.70
Iron .....at	2.00	" "	1.80
Nails .....at	.30	" "	.50
Earth Work			25.00

\$58.80

\$17.60

Sidegate.

Sta. 1721-96. Width 66". Depth 60". Length 26 ft. 20%

Lumber 1,617 ft....at	\$25.00	per M	\$40.40
Carpenter Work ...at	7.00	" "	11.20
Hauling .....at	3.00	" "	4.80
Iron .....at	2.00	" "	3.20
Nails .....at	.30	" "	.50
Earth Work			25.00

\$85.10

\$17.10

2013

Drain.

Sta. 1727-51. Width 11 ft. Depth —. Length 20—. 100%

Lumber 20,400 ft....at	\$25.00	per M	\$60.00
Carpenter Work ...at	7.00	" "	16.80
Hauling .....at	3.00	" "	7.20
Iron .....at	2.00	" "	4.80
Nails .....at	.30	" "	.70
Earth Work			25.00

\$114.50

\$114.50

Sidegate.

Sta. 1735-31. Width 60". Depth 66". Length 20 ft. 40%

Lumber 1,864 ft.	at \$25.00 per M	\$41.60	
Carpenter Work	at 7.00 " "	11.90	
Hauling	at 3.00 " "	5.10	
Iron	at 2.00 " "	3.40	
Nails	at .30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$87.50	\$35.00

Sidegate.

Sta. 1751-60. Width 48". Depth 48". Length 23 ft. 60%

Lumber 1,189 ft.	at \$25.00 per M	\$29.70	
Carpenter Work	at 7.00 " "	8.40	
Hauling	at 3.00 " "	3.60	
Iron	at 2.00 " "	2.40	
Nails	at .30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$69.60	\$42.10

2014

Sidegate.

Sta. 1767-07. Width 66". Depth 74". Length 9-20-6 ft. 50%

Lumber 2,202 ft.	at \$25.00 per M	\$55.00	
Carpenter Work	at 7.00 " "	16.10	
Hauling	at 3.00 " "	6.90	
Iron	at 2.00 " "	4.60	
Nails	at .30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$108.30	\$43.32

Bridge.

Width 16 ft. Length 16 ft. 50%

Lumber 1,468 ft.	at \$25.00 per M	\$36.70	
Carpenter Work	at 7.00 " "	10.50	
Hauling	at 3.00 " "	4.50	
Iron	at 2.00 " "	3.00	
Nails	at .30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$80.20	\$40.10

Weir.

Sta. 1768-47. Width 36 ft. Depth 9 ft. Length 52 ft. 80%

Lumber 15,500 ft...at	\$25.00	per M	\$387.50	
Carpenter Work ...at	7.00	" "	108.50	
Hauling .....at	3.00	" "	46.50	
Iron .....at	2.00	" "	31.00	
Nails .....at	.30	" "	4.60	
Earth Work			120.00	
			<hr/>	
			\$698.10	\$558.50

2015

Weir.

Sta. 1767-47. Width 24½ ft. Depth 7 ft. Length 36 ft. 80%

Lumber 12,914 ft...at	\$25.00	per M	\$322.80	
Carpenter Work ...at	7.00	" "	90.30	
Hauling .....at	3.00	" "	38.70	
Iron .....at	2.00	" "	25.80	
Nails .....at	.30	" "	3.80	
Earth Work			120.00	
			<hr/>	
			\$601.00	\$480.80

County Road Bridge.

Built by County.

Sta. 1790-47. Width —.

Gate in Center Bank.

Sta. 1803-67. Obsolete. 100%

Sidegate.

Sta. 1804-25. Width 70". Depth 60". Length 12-20. 60%

Lumber 1,232 ft...at	\$25.00	per M	\$30.80	
Carpenter Work ...at	7.00	" "	8.40	
Hauling .....at	3.00	" "	3.60	
Iron .....at	2.00	" "	2.40	
Nails .....at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$70.70	\$42.40

2016

Sidegate.

Stat. 1815-80. Width 29". Depth 29". Length 16-. 60%.

Lumber 686 ft.	at	\$25.00	per	M	\$17.10
Carpenter Work	at	7.00	"	"	4.90
Hauling	at	3.00	"	"	2.10
Iron	at	2.00	"	"	1.40
Nails	at	.30	"	"	.50
Earth Work					25.00

\$51.00

\$30.60

Sidegate.

Sta. 1818-74. Width 66". Depth 66". Length 30. 60%.

Lumber 2198 ft.	at	\$25.00	per	M	\$54.90
Carpenter Work	at	7.00	"	"	15.40
Hauling	at	3.00	"	"	6.60
Iron	at	2.00	"	"	4.40
Nails	at	.30	"	"	.60
Earth Work					25.00

\$106.90

\$64.10

Sidegate.

Sta. 1821-77. Width 47". Depth 47". Length 26 ft. 60%.

Lumber 1108 ft.	at	\$25.00	per	M	\$27.70
Carpenter Work	at	7.00	"	"	7.70
Hauling	at	3.00	"	"	3.30
Iron	at	2.00	"	"	2.20
Nails	at	.30	"	"	.50
Earth Work					25.00

\$64.40

\$39.80

2017

Bridge.

Sta. 1825-75. Width 16 ft. Length 50-58 ft. 60%.

Lumber 13457 ft. ...	at	\$25.00	per	M	\$336.40
Carpenter Work	at	7.00	"	"	293.80
Hauling	at	3.00	"	"	40.20
Iron	at	2.00	"	"	26.80
Nails	at	.30	"	"	4.00
Earth Work					25.00

\$526.20

\$315.70

Sidegate.

Sta. 1836-75. Width 64". Depth 66". Length 30 ft. 60%

Lumber 2175 ft.	at	\$25.00	per	M	\$54.40
Carpenter Work	at	7.00	"	"	15.40
Hauling	at	3.00	"	"	6.90
Iron	at	2.00	"	"	4.40
Nails	at	.30	"	"	.70
Earth Work					25.00

\$106.80

\$64.10

Sidegate.

Sta. 1847-24. Width 72". Depth 40". Length 20 ft. 80%

Lumber 1003 —.	at	\$25.00	per	M	\$25.10
Carpenter Work	at	7.00	"	"	7.00
Hauling	at	3.00	"	"	3.00
Iron	at	2.00	"	"	2.00
Nails	at	.30	"	"	.50
Earth Work					25.00

\$62.60

\$50.10

2018

Sidegate.

Sta. 1853-07. Width 48". Depth 60". Length 20-6 ft. 60%

Lumber 783 ft.	at	\$25.00	per	M	\$19.60
Carpenter Work	at	7.00	"	"	5.60
Hauling	at	3.00	"	"	2.40
Iron	at	2.00	"	"	1.60
Nails	at	.30	"	"	.50
Earth Work					25.00

\$54.70

\$32.80

Sidegate.

Sta. 1854-68. Width 66". Depth 64". Length 36 ft. 60%

Lumber 1130 —.	at	\$25.00	per	M	\$28.20
Carpenter Work	at	7.00	"	"	7.70
Hauling	at	3.00	"	"	3.30
Iron	at	2.00	"	"	2.20
Nails	at	.30	"	"	.50
Earth Work					25.00

\$66.90

\$40.10

Weir (old).

Sta. 1859-74. 100%

Sidegate.

Sta. 1875-42. Width 48". Depth 54". Length 20 ft. 60%.

Lumber 633 ft.	at	\$25.00	per	M	\$15.80	
Carpenter Work	at	7.00	"	"	4.90	
Hauling	at	3.00	"	"	2.10	
Iron	at	2.00	"	"	1.40	
Nails	at	.30	"	"	.50	
Earth Work					25.00	
					<hr/>	
					\$49.70	\$29.80

2019 Sidegate.

Sta. 1883-22. Width 66". Depth 64". Length 36 ft. 80%.

Lumber 1528 ft.	at	\$25.00	per	M	\$38.20	
Carpenter Work	at	7.00	"	"	10.50	
Hauling	at	3.00	"	"	4.50	
Iron	at	2.00	"	"	3.00	
Nails	at	.30	"	"	.50	
Earth Work					25.00	
					<hr/>	
					\$81.70	\$49.00

Weir.

Sta. 1883-50. New Weir replacing old. 90%.

Estimated cost old Weir \$590 \$531.00

Gate in Center Bank.

Sta. 1884-05. Width 60". Depth 72". Length 36 ft. 90%

Lumber 1512 ft.	at	\$25.00	per	M	\$37.80	
Carpenter Work	at	7.00	"	"	10.50	
Hauling	at	3.00	"	"	4.50	
Iron	at	2.00	"	"	3.00	
Nails	at	.30	"	"	.50	
Earth Work					25.00	
					<hr/>	
					\$81.30	\$73.20

2020 County Bridge.

Sta. 1884-61. Width 20 ft. Length 114 ft. 60%.

Lumber 11942 ft. . . .	at	\$25.00	per M	\$298.50
Carpenter Work	at	7.00	" "	83.30
Hauling	at	3.00	" "	35.70
Iron	at	2.00	" "	23.80
Nails	at	.30	" "	3.50
Earth Work				25.00

\$469.80

\$281.90

Sidegate.

Sta. 1907-92. Width 74". Depth 60". Length 18 ft. 100%.

Lumber 1144 ft. . . .	at	\$25.00	per M	\$28.60
Carpenter Work	at	7.00	" "	7.70
Hauling	at	3.00	" "	3.30
Iron	at	2.00	" "	2.20
Nails	at	.30	" "	.50
Earth Work				25.00

\$67.30

\$67.30

Sidegate.

Sta. 1927-44. Width 74". Depth 62". Length 144". 40%

Lumber 660 ft.	at	\$25.00	" "	\$16.50
Carpenter Work	at	7.00	" "	4.90
Hauling	at	3.00	" "	2.10
Iron	at	2.00	" "	1.40
Nails	at	.30	" "	.50
Earth Work				25.00

\$50.40

\$20.20

2021 Drain.

Sta. 1927-44. Width 16". Depth 3 ft. Length 140 ft. 50%.

Lumber 2142 ft. . . .	at	\$25.00	per M	\$53.50
Carpenter Work	at	7.00	" "	15.40
Hauling	at	3.00	" "	6.60
Iron	at	2.00	" "	2.20
Nails	at	.30	" "	.70
Earth Work				25.00

\$103.40

\$51.70

Gate in Center Bank.

Sta. 1929-89. Obsolete. 100%

County Bridge.

Sta. 1930-11. Width 20 ft. Length 152 ft. 60%.

Lumber 18537 ft.	at	\$25.00	per	M	\$463.40
Carpenter Work	at	7.00	"	"	129.50
Hauling	at	3.00	"	"	55.50
Iron	at	2.00	"	"	37.00
Nails	at	.30	"	"	5.50
Earth Work					25.00

\$715.90 \$429.50

Sidegate.

Sta. 1929"81". Width 71". Depth 60". Length 24-. 30%

Lumber 1506 ft.	at	\$25.00	per	M	\$37.60
Carpenter Work	at	7.00	"	"	10.50
Hauling	at	3.00	"	"	4.50
Iron	at	2.00	"	"	3.00
Nails	at	.30	"	"	.50
Earth Work					25.00

\$81.10 \$24.30

2022

Sidegate.

Sta. 1970-45. Width 4 ft. Depth 5 ft. Length 20 ft. 30%.

Lumber 1,042 ft.	@	\$25.00	Per	M	\$26.10
Carpenter Work	@	7.00	"	"	7.30
Hauling	@	3.00	"	"	3.10
Iron	@	2.00	"	"	2.10
Nails	@	.30	"	"	.50
Earth Work					25.00

\$64.10 \$19.20

Sidegate.

Sta. 1986-14. Width 24". Depth 42". Length 6 ft. 30%

Lumber 1,351 ft.	@	\$25.00	per	M	\$33.80
Carpenter Work	@	7.00	"	"	9.80
Hauling	@	3.00	"	"	4.20
Iron	@	2.00	"	"	2.80
Nails	@	.30	"	"	.50
Earth Work					25.00

\$76.10 \$22.80

Sidegate.

Sta. 1987-51. Width 11 ft 8". Depth 6 ft. Length 18 ft. 30%

Lumber 3,067	@	\$25.00	per M	\$76.70
Carpenter Work	@	7.00	" "	21.70
Hauling	@	3.00	" "	9.30
Iron	@	2.00	" "	6.20
Nails	@	.30	" "	.90
Earth Work				25.00

\$139.80

\$41.90

2023

Weir.

Sta. 1994-09. Width 20 ft. Depth 12 ft. 4". Length 32 ft. 60%.

Lumber 14,800 ft. . .	@	\$25.00	per M	\$370.00
Carpenter Work . . .	@	7.00	" "	123.60
Hauling	@	3.00	" "	44.40
Iron	@	2.00	" "	29.60
Nails	@	.30	" "	4.40
Earth Work				120.00

\$692.00

\$415.20

Bridge & Weir.

Sta. 1995-29. Width 20 ft. Depth 14 ft. Length 56 ft. 90%.

Lumber 18,000 ft. . .	@	\$25.00	per M	\$450.00
Carpenter Work . . .	@	7.00	" "	126.00
Hauling	@	3.00	" "	54.00
Iron	@	2.00	" "	36.00
Nails	@	.30	" "	5.40
Earth Work				120.00

\$791.40

\$712.30

Bridge.

Sta. 1995-25. Width 20 ft. Length 16 ft. 60%.

Lumber 2,517 ft. . . .	@	\$25.00	per M	\$62.90
Carpenter Work	@	7.00	" "	17.50
Hauling	@	3.00	" "	7.50
Iron	@	2.00	" "	5.00
Nails	@	.30	" "	.70
Earth Work				25.00

\$118.60

\$71.20

2024.

Weir.

Sta. 2006-31. Width 26 ft. Depth 118". Length 118 ft. 70%

Lumber 32,000 ft.	@	\$25.00	per	M	\$800.00
Carpenter Work	@	7.00	"	"	224.00
Hauling	@	3.00	"	"	96.00
Iron	@	2.00	"	"	64.00
Nails	@	.30	"	"	9.60
Earth Work					120.00

\$1313.60

\$919.50

Weir.

Sta. 207-51. Width 6 ft. Depth 10 ft. Length 52 ft. 90%

Lumber 18,000 ft.	@	\$25.00	per	M	\$450.00
Carpenter Work	@	7.00	"	"	126.00
Hauling	@	3.00	"	"	54.00
Iron	@	2.00	"	"	36.00
Nails	@	.30	"	"	5.40
Earth Work					120.00

\$791.40

\$712.30

Sidegate.

Sta. 2012-32. Width 62". Depth 74". Length 28 ft. 60%

Lumber 1,553 ft.	@	\$25.00	per	M	\$38.80
Carpenter Work	@	7.00	"	"	11.20
Hauling	@	3.00	"	"	4.80
Iron	@	2.00	"	"	3.20
Nails	@	.30	"	"	.50
Earth Work					25.00

\$83.50

\$50.10

2025

Sidegate.

Sta. 2016-82. Width 60". Depth 66". Length 22 ft. 70%

Lumber 1,696 ft.	@	\$25.00	per	M	\$42.40
Carpenter Work	@	7.00	"	"	11.90
Hauling	@	3.00	"	"	5.10
Iron	@	2.00	"	"	3.40
Nails	@	.30	"	"	.50
Earth Work					25.00

\$88.30

\$61.80

Sidegate.

Sta. 2046-. Width 4 ft. Depth 4 ft. Length 30 ft. 60%

Lumber 1,373 ft.	@	\$25.00	per M	\$34.30
Carpenter Work	@	7.00	" "	9.80
Hauling	@	3.00	" "	4.20
Iron	@	2.00	" "	2.80
Nails	@	.30	" "	.50
Earth Work				25.00

\$76.50

\$46.00

Bridge.

Sta. 2068- —. Width 16 ft. Length 76 ft. 80%

Lumber 8,422 ft.	@	\$25.00	per M	\$210.50
Carpenter Work	@	7.00	" "	58.80
Hauling	@	3.00	" "	25.20
Iron	@	2.00	" "	16.80
Nails	@	.70	" "	2.50
Earth Work				25.00

\$338.80

\$271.10

2026

Sidegate.

Sta. 2069-59. Width 56". Depth 24". Length 26 ft. 60%.

Lumber 2,078 ft.	@	\$25.00	per M	\$51.90
Carpenter Work.	@	7.00	" "	14.70
Hauling	@	3.00	" "	6.30
Iron	@	2.00	" "	4.20
Nails	@	.30	" "	.60
Earth Work.				25.00

\$102.70

\$61.60

Sidegate.

Sta. 2093-42. Width 36". Depth 36". Length 28 ft. 70%.

Lumber 915 ft.	@	\$25.00	per M	\$22.90
Carpenter Work.	@	7.00	" "	6.30
Hauling	@	3.00	" "	2.70
Iron	@	2.00	" "	1.80
Nails	@	.30	" "	.50
Earth Work.				25.00

\$59.20

\$41.40

Sidegate.

Sta. 2098-62. Width 6 ft. Depth 86". Length 26 ft. 60%.

Lumber 6,130 ft....@	\$25.00	per M	\$61.30	
Carpenter Work....@	7.00	" "	16.80	
Hauling@	3.00	" "	7.20	
Iron@	2.00	" "	4.80	
Nails@	.30	" "	.70	
Earth Work.....			25.00	
			<hr/>	
			\$115.80	\$69.50

2027

Bridge.

Sta. 2106-24. Width 16 ft. Length 64 ft. 90%.

Lumber 6,384 ft....@	\$25.00	per M	\$159.60	
Carpenter Work....@	7.00	" "	44.80	
Hauling@	3.00	" "	19.20	
Iron@	2.00	" "	12.80	
Nails@	.30	" "	1.90	
Earth Work.....			25.00	
			<hr/>	
			\$263.30	\$237.00

Sidegate.

Sta. 2108-11. Width 68". Depth 68". Length 30 ft. 60%.

Lumber 1,858 ft....@	\$25.00	per M	\$46.50	
Carpenter Work....@	7.00	" "	13.30	
Hauling@	3.00	" "	5.70	
Iron@	2.00	" "	3.80	
Nails@	.30	" "	.60	
Earth Work.....			25.00	
			<hr/>	
			\$94.90	\$56.90

Bridge.

Sta. 2108-11. Width 16 ft. Length 20 ft. 70%.

Lumber 1,675 ft....@	\$25.00	per M	\$41.90	
Carpenter Work....@	7.00	" "	11.90	
Hauling@	3.00	" "	5.10	
Iron@	2.00	" "	3.40	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$87.80	\$61.50

2128

Sidegate.

Sta. 2111-99. Width 2 ft. Depth 3 ft. Length 39 ft. 70%.

Lumber 1,138 ft...	@	\$25.00	per M	\$28.50
Carpenter Work...	@	7.00	" "	7.90
Hauling	@	3.00	" "	3.40
Iron	@	2.00	" "	2.30
Nails	@	.30	" "	.50
Earth Work.....				25.00

\$67.60

\$47.30

Sidegate.

Sta. 2118-48. Width 52". Depth 72". Length 26 ft. 60%.

Lumber 1,965 ft...	@	\$25.00	per M	\$49.10
Carpenter Work...	@	7.00	" "	14.00
Hauling	@	3.00	" "	6.00
Iron	@	2.00	" "	4.00
Nails	@	.30	" "	.60
Earth Work.....				25.00

\$98.70

\$59.20

Sidegate.

Sta. 2128-87. Width 50". Depth 44". Length 28 ft. 50%.

Lumber 1,234 ft...	@	\$25.00	per M	\$30.80
Carpenter Work...	@	7.00	" "	8.40
Hauling	@	3.00	" "	3.60
Iron	@	2.00	" "	2.40
Nails	@	.30	" "	.50
Earth Work.....				25.00

\$70.70

\$35.40

2029

Sidegate.

Sta. 2143-97. Width 6 ft. Depth 68". Length 36 ft. 80%.

Lumber 2,288 ft...	@	\$25.00	per M	\$57.20
Carpenter Work...	@	7.00	" "	16.10
Hauling	@	3.00	" "	6.90
Iron	@	2.00	" "	4.60
Nails	@	.30	" "	.70
Earth Work.....				25.00

\$110.50

\$88.40

Weir.

Sta. 2145-91. Width 24 ft. Depth 9 ft. Length 42 ft. 70%.

Lumber 13,807 ft.@	\$25.00	per M	\$345.20	
Carpenter Work.@	7.00	" "	96.60	
Hauling@	3.00	" "	41.40	
Iron@	2.00	" "	27.60	
Nails@	.30	" "	4.10	
Earth Work.			120.00	
			<hr/>	
			\$634.90	\$444.40

Sidegate.

Sta. 2146-42. Width 2 ft. Depth 3 ft. Length 60 ft. 50%.

Lumber 1,582 ft.@	\$25.00	per M	\$39.50	
Carpenter Work.@	7.00	" "	11.20	
Hauling@	3.00	" "	4.80	
Iron@	2.00	" "	3.20	
Nails@	.30	" "	.50	
Earth Work.			25.00	
			<hr/>	
			\$84.20	\$42.10

2030 Drain.

Sta. 2180-19. Wings 10-10. Dia. Pipe 2 ft. Length 100 ft. 100%

Lumber 526 ft.@	\$25.00	per M	\$13.20	
Carpenter —@	7.00	" "	3.50	
Hauling@	3.00	" "	1.50	
Iron@	2.00	" "	1.00	{Valuation of Pipe \$250
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$44.70	\$44.70

Sidegate.

Sta. 2180-78. Width 32". Depth 32". Length 20 ft. 40%

Lumber 651 ft.@	\$25.00	per M	\$16.30	
Carpenter Work.@	7.00	" "	4.90	
Hauling@	3.00	" "	2.10	
Iron@	2.00	" "	1.40	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$50.20	\$20.10

Bridge.

Sta. 2184-50.	Width 16 ft.	Length 70 ft.	80%
Lumber 6,398 ft....@	\$25.00 per M	\$159.90	
Carpenter Work....@	7.00 " "	44.80	
Hauling@	3.00 " "	19.20	
Iron@	2.00 " "	12.80	
Nails@	.30 " "	1.90	
Earth Work		25.00	
		<hr/>	
		\$263.60	\$210.90

2031

Sidegate.

Sta. 2184-91.	Width 3 ft.	Depth 56".	Length 22 ft.	20%
Lumber 1,209 ft....@	\$25.00 per M	\$30.20		
Carpenter Work....@	7.00 " "	8.40		
Hauling@	3.00 " "	3.60		
Iron@	2.00 " "	2.40		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$70.10		\$14.00

Sidegate.

Sta. 2252-08.	Width 6 ft.	Depth 5½ ft.	Length 32 ft.	80%
Lumber 1,815 ft....@	\$25.00 per M	\$45.40		
Carpenter Work....@	7.00 " "	12.60		
Hauling@	3.00 " "	5.40		
Iron@	2.00 " "	3.60		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$92.50		\$74.00

Sidegate.

Sta. 2257-33.	Width 20 ft.	Depth 8 ft.	Length 18 ft.	30%
Lumber 3,287 ft....@	\$25.00 per M	\$82.20		
Carpenter Work....@	7.00 " "	23.10		
Hauling@	3.00 " "	9.90		
Iron@	2.00 " "	6.60		
Nails@	.30 " "	1.00		
Earth Work		25.00		
		<hr/>		
		\$147.80		\$44.30

2032

Sidegate.

Sta. 2281-22. Width 16 ft. Depth 76". Length 24 ft. 50%

Lumber 3,680 ft. . . @	\$25.00 per M	\$92.00
Carpenter Work . . . @	7.00 " "	25.90
Hauling @	3.00 " "	11.10
Iron @	2.00 " "	7.40
Nails @	.30 " "	1.10
Earth Work		25.00

\$162.50

\$81.20

Bridge.

Sta. 2281-67 Newly Constructed Bridge.

Bridge.

Sta. 2283-52. Width 12 ft. Length 70 ft. 20%

Lumber 6,556 ft. . . @	\$25.00 per M	\$163.90
Carpenter Work . . . @	7.00 " "	46.20
Hauling @	3.00 " "	19.80
Iron @	2.00 " "	13.20
Nails @	.30 " "	2.00
Earth Work		25.00

\$270.10

\$51.00

Sidegate.

Sta. 2286-56. Width 32". Depth 80". Length 20 ft. 20%

Lumber 1,298 Ft. . . @	\$25.00 per M	\$32.40
Carpenter Work . . . @	7.00 " "	9.10
Hauling @	3.00 " "	3.90
Iron @	2.00 " "	2.60
Nails @	.30 " "	.50
Earth Work		25.00

\$73.50

\$14.70

2033

Sidegate.

Sta. 2303-56. Width 3 ft. Depth 49". Length 22 ft. 30%

Lumber 1,013 ft. . . @	\$25.00 per M	\$25.30
Carpenter Work . . . @	7.00 " "	7.00
Hauling @	3.00 " "	3.00
Iron @	2.00 " "	2.00
Nails @	.30 " "	.50
Earth Work		25.00

\$62.80

\$18.90

Sidegate.

Sta. 2315-81. Width 4 ft. Depth 5 ft. Length 34 ft. 90%

Lumber 1,440 ft....@	\$25.00	per M	\$36.00
Carpenter Work ...@	7.00	" "	10.50
Hauling@	3.00	" "	4.50
Iron@	2.00	" "	3.00
Nails@	.30	" "	.50
Earth Work			25.00

\$79.50

\$69.70

Sidegate.

Sta. 2316-19. Width 44". Depth 37". Length 28 ft. 30%

Lumber 973 ft....@	\$25.00	per M	\$24.30
Carpenter Work ...@	7.00	" "	7.00
Hauling@	3.00	" "	3.00
Iron@	2.00	" "	2.00
Nails@	.35	" "	.50
Earth Work			25.00

\$61.80

\$18.50

2034

Bridge.

Sta. 2333-35. Width 16 ft. Length 68 ft. 90%

Lumber 7,231 ft....@	\$25.00	per M	\$180.80
Carpenter Work ...@	7.00	" "	50.40
Hauling@	3.00	" "	21.60
Iron@	2.00	" "	14.40
Nails@	.30	" "	2.20
Earth Work			25.00

\$294.40

\$265.00

Sidegate.

Sta. 2361-87. Width 46". Depth 64". Length 24 ft. 30%

Lumber 1,387 ft....@	\$25.00	per M	\$34.70
Carpenter Work ...@	7.00	" "	9.80
Hauling@	3.00	" "	4.20
Iron@	2.00	" "	2.80
Nails@	.30	" "	.50
Earth Work			25.00

\$77.00

\$23.10

Drain.

Sta. 3,362 #25. Width 72". Depth 30". Length 140 ft. 10%

Lumber 7,330 ft. . . @	\$25.00	per M	\$184.50
Carpenter Work . . . @	7.00	" "	51.80
Hauling @	3.00	" "	22.20
Iron @	2.00	" "	14.80
Nails @	.30	" "	2.20
Earth Work			25.00

\$300.50

\$30.00

2035

Bridge.

Sta. 2368-44. Width 24 ft. Length 60 ft. 80%

Lumber 9,357 ft. . . @	\$25.00	per M	\$234.40
Carpenter Work . . . @	7.00	" "	65.80
Hauling @	3.00	" "	28.20
Iron @	2.00	" "	18.80
Nails @	.30	" "	2.80
Earth Work			25.00

\$375.00

\$300.00

Sidegate.

Sta. 2374-66. Width 4 ft. Depth 68". Length 20 ft. 30%

Lumber 1,592 ft. . . @	\$25.00	per M	\$39.80
Carpenter Work . . . @	7.00	" "	11.20
Hauling @	3.00	" "	4.80
Iron @	2.00	" "	3.20
Nails @	.30	" "	.50
Earth Work			25.00

\$84.50

\$25.40

Sidegate.

Sta. 2390-56. Width 4 ft. Depth 79". Length 22 ft. 30%

Lumber 1,444 ft. . . @	\$25.00	per M	\$43.60
Carpenter Work . . . @	7.00	" "	11.90
Hauling @	3.00	" "	5.10
Iron @	2.00	" "	3.40
Nails @	.30	" "	.50
Earth Work			25.00

\$89.50

\$26.80

2036

Bridge.

Sta. 2396-75.	Width 16 ft.	Length 74 ft.	80%.
Lumber 7,733 ft...@	\$25.00 per M	\$193.30	
Carpenter Work...@	7.00 " "	53.90	
Hauling@	3.00 " "	23.10	
Iron@	2.00 " "	15.40	
Nails@	.30 " "	2.30	
Earth Work.....		25.00	
		<hr/>	
		\$313.00	\$250.00

Sidegate.

Sta. 2397-59.	Width 58".	Depth 72".	Length 20 ft.	30%.
Lumber 1,578 ft...@	\$25.00 per M	\$39.40		
Carpenter Work...@	7.00 " "	11.20		
Hauling@	3.00 " "	4.80		
Iron@	2.00 " "	3.20		
Nails@	.30 " "	.50		
Earth Work.....		25.00		
		<hr/>		
		\$84.10	\$25.20	

Sidegate.

Sta. 2423-41.	Width 60".	Depth 84".	Length 20 ft.	30%.
Lumber 1,685 ft...@	\$25.00 per M	\$42.10		
Carpenter Work...@	7.00 " "	11.90		
Hauling@	3.00 " "	5.10		
Iron@	2.00 " "	3.40		
Nails@	.30 " "	.50		
Earth Work.....		25.00		
		<hr/>		
		\$88.00	\$26.40	

2037

Drain.

Sta. 2423-41.	Width 7 ft.	Depth 3 ft.	Length 140 ft.	30%.
Lumber 8,946 ft...@	\$25.00 per M	\$223.70		
Carpenter Work...@	7.00 " "	62.30		
Hauling@	3.00 " "	26.70		
Iron@	2.00 " "	17.80		
Nails@	.30 " "	2.70		
Earth Work.....		25.00		
		<hr/>		
		\$358.10	\$170.40	

Sidegate.

Sta. 2445-11. Width 60". Depth 54". Length 26 ft. 50%.

Lumber 2,138 ft...@	\$25.00	per M	\$53.40
Carpenter Work...@	7.00	" "	14.70
Hauling@	3.00	" "	6.30
Iron@	2.00	" "	4.20
Nails@	.30	" "	.60
Earth Work.....			25.00

\$104.20

\$52.10

Sidegate.

Sta. 2450-95. Width 68". Depth 68". Length 26 ft. 40%.

Lumber 1,688 ft...@	\$25.00	per M	\$42.20
Carpenter Work...@	7.00	" "	11.90
Hauling@	3.00	" "	5.10
Iron@	2.00	" "	3.40
Nails@	.30	" "	.50
Earth Work.....			25.00

\$88.10

\$35.20

2038

Weir.

Sta. 2451-47. Width 2 ft. Depth 84". Length 44 ft. 40%.

Lumber 14,000 ft...@	\$25.00	per M	\$350.00
Carpenter Work...@	7.00	" "	98.00
Hauling@	3.00	" "	42.00
Iron@	2.00	" "	28.00
Nails@	.30	" "	4.20
Earth Work.....			120.00

\$642.20

\$256.90

Sidegate.

Sta. 2451-47. Width 36". Depth 50". Length 20 ft. 10%.

Lumber 1,052 — ..@	\$25.00	per M	\$26.30
Carpenter Work...@	7.00	" "	7.70
Hauling@	3.00	" "	3.30
Iron@	2.00	" "	2.20
Nails@	.30	" "	.50
Earth Work.....			25.00

\$65.00

\$6.50

Weir.

Sta. 2453-00. Width 20 ft. Depth 8½ ft. Length 40 ft. 40%.

Lumber 13,807 ft....@	\$25.00 per M	\$345.20	
Carpenter Work....@	7.00 " "	76.60	
Hauling@	3.00 " "	41.40	
Iron@	2.00 " "	27.60	
Nails@	.30 " "	4.10	
Earth Work.....		25.00	
		<hr/>	
		\$614.90	\$246.00

2039

Sidegate.

Sta. 2498-02. Width 34". Depth 32". Length 30 ft. 40%.

Lumber 802 ft....@	\$25.00 per M	\$20.00	
Carpenter Work....@	7.00 " "	5.60	
Hauling@	3.00 " "	2.40	
Iron@	2.00 " "	1.60	
Nails@	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$55.10	\$22.00

Sidegate.

Sta. 2569-39. Width 30". Depth 70". Length 24 ft. 30%.

Lumber 1,436 ft....@	\$25.00 per M	\$35.90	
Carpenter Work....@	7.00 " "	9.80	
Hauling@	3.00 " "	4.20	
Iron@	2.00 " "	2.80	
Nails@	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$78.20	\$23.20

Sidegate.

Sta. 2588-15. Width 66". Depth 70". Length 20 ft. 30%.

Lumber 1,804 ft....@	\$25.00 per M	\$45.10	
Carpenter Work....@	7.00 " "	12.60	
Hauling@	3.00 " "	5.40	
Iron@	2.00 " "	3.60	
Nails@	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$92.20	\$27.60

2040

Sidegate.

Sta. 2598-94. Width 34". Depth 62". Length 34 ft. 40%.

Lumber 1,659 ft....@	\$25.00	per M	\$41.50
Carpenter Work....@	7.00	" "	11.20
Hauling@	3.00	" "	4.80
Iron@	2.00	" "	3.20
Nails@	.30	" "	.50
Earth Work.....			25.00

\$86.20

\$34.50

Sidegate.

Sta. 2599-61. Width 92". Depth 60". Length 26 ft. 40%.

Lumber 2,369 ft....@	\$25.00	per M	\$59.20
Carpenter Work....@	7.00	" "	16.80
Hauling@	3.00	" "	7.20
Iron@	2.00	" "	4.80
Nails@	.30	" "	.70
Earth Work.....			25.00

\$113.70

\$45.50

Sidegate.

Sta. 2600-86. Width 32". Depth 62". Length 27 ft. 30%.

Lumber 1,333 ft....@	\$25.00	per M	\$33.30
Carpenter Work....@	7.00	" "	9.30
Hauling@	3.00	" "	3.90
Iron@	2.00	" "	2.60
Nails@	.30	" "	.50
Earth Work.....			25.00

\$74.60

\$22.40

2041

Weir.

Sta. 2601-23. Width 20". Depth 9 ft. Length 40 ft. 80%.

Lumber 13,807. Same as Station 2847-69.

\$634.90

\$507.90

Bridge.

Sta. 2617-22. Width 16 ft. Length 67 ft. 60%.

Lumber 7,147 ft....@	\$25.00	per M	\$178.70
Carpenter Work....@	7.00	" "	49.70
Hauling@	3.00	" "	21.30
Iron@	2.00	" "	14.20
Nails@	.30	" "	2.10
Earth Work.....			25.00

\$291.00

\$174.60

Sidegate.

Sta. 2630-89. Width 48". Depth 60". Length 26 ft. 30%.

Lumber 1,660 ft.@	\$25.00 per M	\$41.50	
Carpenter Work@	7.00 " "	11.90	
Hauling@	3.00 " "	5.10	
Iron@	2.00 " "	3.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$87.40	\$26.20

2042

Sidegate.

Sta. 2644-34. Width 12 ft. Depth 84". Length 36 ft. 30%.

Lumber 3,932 ft.@	\$25.00 per M	\$98.80	
Carpenter Work@	7.00 " "	27.30	
Hauling@	3.00 " "	11.70	
Iron@	2.00 " "	7.80	
Nails@	.30 " "	1.20	
Earth Work		25.00	
		<hr/>	
		\$171.80	\$52.50

Drain.

Sta. 2645-1. Wing Wil 4-7. Dia. of Pipe 2 ft.

Lumber 476 ft.@	\$25.00 per M	\$11.90	
Carpenter Work@	7.00 " "	3.50	
Hauling@	3.00 " "	1.50	
Iron@	2.00 " "	1.00	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$42.90	

Valuation of
Pipe \$220.00

Sidegate.

Sta. 2656-56. Width 3 ft. Depth 60". Length 24 ft. 30%.

Lumber 1,419 ft.@	\$25.00 per M	\$35.50	
Carpenter Work@	7.00 " "	9.80	
Hauling@	3.00 " "	4.20	
Iron@	2.00 " "	2.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$77.80	\$23.30

2043

Sidegate.

Sta. 2660-45. Width 46". Depth 54". Length 26 ft. 40%

Lumber 1,289 ft.	@	\$25.00	per M	\$32.20
Carpenter Work	@	7.00	" "	9.10
Hauling	@	3.00	" "	3.90
Iron	@	2.00	" "	2.60
Nails	@	.30	" "	.50
Earth Work				25.00

\$74.30

\$29.70

Bridge.

Sta. 2671-05. Width 24 ft. Length 72 ft. 40%

Lumber 11,544 ft. s.	@	\$25.00	per M	\$288.60
Carpenter Work	@	7.00	" "	80.50
Hauling	@	3.00	" "	34.50
Iron	@	2.00	" "	23.00
Nails	@	.30	" "	3.50
Earth Work				25.00

\$455.10

\$182.00

Spillway.

Sta. 2671-45. Width 20 ft. Depth 7 ft. Length 16 ft. 30%

Lumber 6,324 ft.	@	\$25.00	per M	\$158.10
Carpenter Work	@	7.00	" "	44.10
Hauling	@	3.00	" "	18.90
Iron	@	2.00	" "	12.60
Nails	@	.30	" "	1.90
Earth Work				25.00

\$260.60

\$78.20

2044

Sidegate.

Sta. 2675-63. Width 2 ft. Depth 42". Length 26 ft. 30%.

Lumber 957 ft.	@	\$25.00	per M	\$23.90
Carpenter Work	@	7.00	" "	7.00
Hauling	@	3.00	" "	3.00
Iron	@	2.00	" "	2.00
Nails	@	.30	" "	.50
Earth Work				25.00

\$61.40

\$18.40

Sidegate.

Sta. 2678-14. Width 68". Depth 76". Length 24 ft. 30%

Lumber 1,998 ft.	@	\$25.00	per M	\$50.00
Carpenter Work	@	7.00	" "	14.00
Hauling	@	3.00	" "	6.00
Iron	@	2.00	" "	4.00
Nails	@	.30	" "	.60
Earth Work				25.00

\$99.60

\$29.90

Sidegate.

Sta. 2680-71. Width 32". Depth 44". Length 24 ft. 30%.

Lumber 971 ft.	@	\$25.00	per M	\$24.30
Carpenter Work	@	7.00	" "	6.80
Hauling	@	3.00	" "	2.90
Iron	@	2.00	" "	1.90
Nails	@	.30	" "	.50
Earth Work				25.00

\$61.40

\$18.40

2045

Sidegate.

Sta. 2693-87. Width 3 ft. Depth 56". Length 24 ft. 30%.

Lumber 1,031 ft.	@	\$25.00	per M	28.30
Carpenter Work	@	7.00	" "	7.90
Hauling	@	3.00	" "	3.40
Iron	@	2.00	" "	2.30
Nails	@	.30	" "	.50
Earth Work				25.00

\$67.40

\$20.20

Sidegate.

Sta. 2696-10. Width 66". Depth 74". Length 28 ft. 30%.

Lumber 2,276 ft.	@	\$25.00	per M	\$56.90
Carpenter Work	@	7.00	" "	15.90
Hauling	@	3.00	" "	6.80
Iron	@	2.00	" "	4.50
Nails	@	.30	" "	.70
Earth Work				25.00

\$108.80

\$32.90

Sidegate.

Sta. 2713-32. Width 34". Depth 38". Length 26 ft. 60%.

Lumber 831 ft.	@	\$25.00	per M	\$20.80
Carpenter Work	@	7.00	" "	5.60
Hauling	@	3.00	" "	2.40
Iron	@	2.00	" "	1.60
Nails	@	.30	" "	.50
Earth Work				25.00

\$55.90**\$33.50**

2046

Sidegate.

Sta. 2729-74. Width 66". Depth 78". Length 26 ft. 30%

Lumber 2,446 ft.	@	\$25.00	per M	\$61.20
Carpenter Work	@	7.00	" "	17.10
Hauling	@	3.00	" "	7.30
Iron	@	2.00	" "	4.90
Nails	@	.30	" "	.70
Earth Work				25.00

\$116.20**\$34.90****Sidegate.**

Sta. 2730-49. Width 62". Depth 42". Length 24 ft. 30%.

Lumber 1,225 ft.	@	\$25.00	per M	\$30.60
Carpenter Work	@	7.00	" "	8.40
Hauling	@	3.00	" "	3.60
Iron	@	2.00	" "	2.40
Nails	@	.30	" "	.50
Earth Work				25.00

\$70.50**\$21.10****Weir.**

Sta. 2730-91. Width 25 ft. Depth 104". Length 40 ft. 70%.

Same as Station 2847-69. **\$634.90** **\$440.40****Bridge.**

Sta. 2731-84. Width 24 ft. Length 68 ft. 50%

Lumber 10,335 ft. ..	@	\$25.00	per M	\$258.40
Carpenter Work	@	7.00	" "	72.30
Hauling	@	3.00	" "	30.90
Iron	@	2.00	" "	3.10
Earth Work				25.00

\$410.30**\$205.10**

2047

Sidegate.

Sta. 2745-87. Width 42". Depth 62". Length 24 ft. 40%.

Lumber 1,280 ft.	@	\$25.00	per M	\$32.00
Carpenter Work	@	7.00	" "	9.10
Hauling	@	3.00	" "	3.90
Iron	@	2.00	" "	2.70
Nails	@	.30	" "	.50
Earth Work				25.00

\$73.10

\$29.20

Sidegate.

Sta. 2754-00. Width 38". Depth 42". Length 20 ft. 30%.

Lumber 887 ft.	@	\$25.00	per M	\$22.20
Carpenter Work	@	7.00	" "	6.30
Hauling	@	3.00	" "	2.70
Iron	@	2.00	" "	1.80
Nails	@	.30	" "	.50
Earth Work				25.00

\$58.50

\$17.50

Sidegate.

Sta. 2758-64. Width 4 ft. Depth 3 ft. Length 20 ft. 30%.

Lumber 885 ft.	@	\$25.00	per M	\$22.10
Carpenter Work	@	7.00	" "	6.20
Hauling	@	3.00	" "	2.60
Iron	@	2.00	" "	1.80
Nails	@	.30	" "	.50
Earth Work				25.00

\$58.20

\$17.50

2048

Sidegate.

Sta. 2759-30. Width 66". Depth 70". Length 28 ft. 30%

Lumber 2,213 ft.	@	\$25.00	per M	\$57.80
Carpenter Work	@	7.00	" "	15.10
Hauling	@	3.00	" "	6.90
Iron	@	2.00	" "	4.60
Nails	@	.30	" "	.70
Earth Work				25.00

\$110.10

\$33.00

Sidegate.

Sta. 2774-48. Width 4 ft. Depth 5 ft. Length 20 ft. 30%.

Lumber 1,368 ft.	@	\$25.00	per M	\$34.20	
Carpenter Work	@	7.00	" "	9.80	
Hauling	@	3.00	" "	4.20	
Iron	@	2.00	" "	2.80	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$76.50	\$22.90

Aidegate.

Sta. 2775-84. Width 40 in. Depth 42". Length 26 ft. 50%.

Lumber 1,011 ft.	@	\$25.00	per M	\$25.30	
Carpenter Work	@	7.00	" "	7.00	
Hauling	@	3.00	" "	3.00	
Iron	@	2.00	" "	2.00	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$62.80	\$31.40

2049 Sidegate.

Sta. 2783-52. Width 66". Depth 76". Length 28 ft. 30%

Lumber 2,183 ft.	@	\$25.00	per M	\$54.80	
Carpenter Work	@	7.00	" "	15.40	
Hauling	@	3.00	" "	6.60	
Iron	@	2.00	" "	4.60	
Nails	@	.30	" "	.70	
Earth Work				25.00	
				<hr/>	
				\$107.10	\$32.10

Sidegate.

Sta. 2783-00. Width 3 ft. Depth 4 ft. Length 20 ft. 30%.

Lumber 921 ft.	@	\$25.00	per M	\$23.00	
Carpenter Work	@	7.00	" "	6.40	
Hauling	@	3.00	" "	2.80	
Iron	@	2.00	" "	1.80	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$59.50	\$17.80

Sidegate.

Sta. 2793-92. Width 66". Depth 70". Length 26 ft. 40%.

Lumber 3,285 ft.	@	\$25.00	per M	\$57.10	
Carpenter Work	@	7.00	" "	16.10	
Hauling	@	3.00	" "	6.90	
Iron	@	2.00	" "	4.60	
Nails	@	.30	" "	.70	
Earth Work				25.00	
				<hr/>	
				\$110.40	\$24.20

2050

Sidegate.

Sta. 2795-08. Width 3 ft. Depth 5 ft. Length 20 ft. 40%.

Lumber 1,204 ft.	@	\$25.00	per M	\$30.10	
Carpenter Work	@	7.00	" "	8.40	
Hauling	@	3.00	" "	3.60	
Iron	@	2.00	" "	2.40	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$70.00	\$28.00

Sidegate.

Sta. 2807-05. Width 66". Depth 74". Length 28 ft. 30%.

Lumber 2,159 ft.	@	\$25.00	per M	\$54.00	
Carpenter Work	@	7.00	" "	14.70	
Hauling	@	3.00	" "	6.60	
Iron	@	2.00	" "	4.20	
Nails	@	.30	" "	.70	
Earth Work				25.00	
				<hr/>	
				\$105.20	\$31.60

Sidegate.

Sta. 2807-05. Width 5 ft. Depth 6 ft. Length 20 ft. 30%.

Lumber 1,728 ft.	@	\$25.00	per M	\$43.20	
Carpenter Work	@	7.00	" "	11.90	
Hauling	@	3.00	" "	5.10	
Iron	@	2.00	" "	3.40	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$89.10	\$26.70

2051

Bridge.

Sta. 2816-66. Width 28 ft. Length 64 ft. 60%

Lumber 9,856 ft.	@	\$25.00	per M	\$246.60
Carpenter Work	@	7.00	" "	68.60
Hauling	@	3.00	" "	29.40
Iron	@	2.00	" "	19.60
Nails	@	.30	" "	3.00
Earth Work				25.00

\$392.20

\$196.10

Sidegate.

Sta. 2818-06. Width 66". Depth 76". Length 30 ft. 30%.

Lumber 2,695 ft.	@	\$25.00	per M	\$67.40
Carpenter Work	@	7.00	" "	18.90
Hauling	@	3.00	" "	8.10
Iron	@	2.00	" "	5.40
Nails	@	.30	" "	.80
Earth Work				25.00

\$125.60

\$37.70

Sidegate.

Sta. 2826-60. Width 66". Depth 88". Length 28 ft. 40%

Lumber 3,625 ft.	@	\$25.00	per M	\$66.60
Carpenter Work	@	7.00	" "	18.20
Hauling	@	3.00	" "	7.90
Iron	@	2.00	" "	5.20
Nails	@	.30	" "	.80
Earth Work				25.00

\$122.70

\$49.10

2052

Sidegate.

Sta. 2837-37. Width 38". Depth 56". Length 27 ft. 40%

Lumber 1,050 ft. ...	@	\$25.00	per M	\$26.20
Carpenter Work ...	@	7.00	" "	7.00
Hauling	@	3.00	" "	3.00
Iron	@	2.00	" "	2.00
Nails	@	.30	" "	.50
Earth Work				25.00

\$63.70

\$25.50

Sidegate.

Sta. 2843-21. Width 4 ft. Depth 66". Length 26 ft. 40%

Lumber 1,529 ft.@	\$25.00	per M	\$38.20	
Carpenter Work@	7.00	" "	10.50	
Hauling@	3.00	" "	4.50	
Iron@	2.00	" "	3.00	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$81.70	\$32.70

Weir.

Sta. 2847-08. Width 21 ft. Depth 9 ft. Length 40 ft. 80%

Same as Station 2847-69 \$634.90 \$507.90

Weir.

Sta. 2847-30. Width 20". Depth 9 ft. Length 34 ft. 70%

Lumber 12,500 ft.@	\$25.00	per M	\$312.50	
Carpenter Work@	7.00	" "	87.50	
Hauling@	3.00	" "	37.50	
Iron@	2.00	" "	25.00	
Nails@	.30	" "	3.70	
Earth Work			120.00	
			<hr/>	
			\$586.20	\$410.30

2053

Weir.

Sta. 2847-69. Width 20 ft. Depth 108". Length 40 ft. 60%

Lumber 13,807 ft.@	\$25.00	per M	\$345.20	
Carpenter Work@	7.00	" "	96.60	
Hauling@	3.00	" "	41.40	
Iron@	2.00	" "	27.60	
Nails@	.30	" "	4.10	
Earth Work			120.00	
			<hr/>	
			\$634.90	\$380.90

Sidegate.

Sta. 2857-67. Width 60". Depth 64". Length 25 ft. 10%

Lumber 1,743 ft.@	\$25.00	per M	\$43.60	
Carpenter Work@	7.00	" "	11.90	
Hauling@	3.00	" "	4.10	
Iron@	2.00	" "	3.40	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$88.50	\$8.90

Sidegate.

Sta. 2867-77. Width 56". Depth 80". Length 28 ft. 30%

Lumber 2,327 ft. . . @	\$25.00 per M	\$58.20	
Carpenter Work . . . @	7.00 " "	16.10	
Hauling @	3.00 " "	6.90	
Iron @	2.00 " "	4.60	
Nails @	.30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$111.50	\$33.50

2054

Bridge.

Sta. 2872-83. Width 16 ft. Length 60 ft. 70%

Lumber 6,561 ft. . . @	\$25.00 per M	\$164.00	
Carpenter Work . . . @	7.00 " "	46.20	
Hauling @	3.00 " "	19.30	
Iron @	2.00 " "	13.20	
Nails @	.30 " "	2.00	
Earth Work		25.00	
		<hr/>	
		\$270.20	\$189.00

Sidegate.

Sta. 2877-92. Width 66". Depth 56". Length 28 ft. 30%

Lumber 1,784 ft. . . @	\$25.00 per M	\$44.60	
Carpenter Work . . . @	7.00 " "	12.60	
Hauling @	3.00 " "	5.40	
Iron @	2.00 " "	3.60	
Nails @	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$91.70	\$27.50

Sidegate.

Sta. 2884-73. Width 66". Depth 80". Length 27 ft. 30%

Lumber 2,320 ft. . . @	\$25.00 per M	\$58.00	
Carpenter Work . . . @	7.00 " "	16.10	
Hauling @	3.00 " "	6.90	
Iron @	2.00 " "	4.60	
Nails @	.30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$111.30	\$33.40

2055

Sidegate.

Sta. 2888-57. Width 8 ft. Depth 5 ft. Length 24 ft. 40%

Lumber 2,076 ft.@	\$25.00	per M	\$51.90	
Carpenter Work@	7.00	" "	14.70	
Hauling@	3.00	" "	6.30	
Iron@	2.00	" "	4.20	
Nails@	.30	" "	.60	
Earth Work			25.00	
			<hr/>	
			\$102.70	\$41.10

Sidegate.

Sta. 2895-71. Width 74". Depth 62". Length 26 ft. 40%

Lumber 1,812 ft.@	\$25.00	per M	\$45.30	
Carpenter Work@	7.00	" "	12.60	
Hauling@	3.00	" "	5.40	
Iron@	2.00	" "	3.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$92.40	\$37.00

Sidegate.

Sta. 2898-68. Width 8 ft. Depth 6 ft. Length 28 ft. 30%

Lumber 2,723 ft.@	\$25.00	per M	\$68.10	
Carpenter Work@	7.00	" "	19.00	
Hauling@	3.00	" "	8.10	
Iron@	2.00	" "	5.40	
Nails@	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$126.40	\$37.90

2056

Weir.

Sta. 2898-87. Width 6 ft. Depth 68". Length 26 ft. 30%

Lumber 1,970 ft.@	\$25.00	per M	\$49.20	
Carpenter Work@	7.00	" "	14.00	
Hauling@	3.00	" "	6.00	
Iron@	2.00	" "	4.00	
Nails@	.30	" "	.60	
Earth Work			120.00	
			<hr/>	
			\$193.80	\$58.10

Weir.

Sta. 2899-41. Width 20 ft. Depth 98". Length 40 ft. 20%.

Lumber 12,914 ft...@	\$25.00	per M	\$322.80	
Carpenter Work ...@	7.00	" "	90.00	
Hauling@	3.00	" "	38.70	
Iron@	2.00	" "	25.80	
Nails@	.30	" "	3.90	
Earth Work			120.00	
			<u>\$601.20</u>	\$120.20

Bridge.

Sta. 2901-75 Width 24 ft. Length 62 ft. 30%

Lumber 10,346 ft...@	\$25.00	per M	\$258.60	
Carpenter Work ...@	7.00	" "	72.10	
Hauling@	3.00	" "	30.90	
Iron@	2.00	" "	20.60	
Nails@	.30	" "	3.10	
Earth Work			25.00	
			<u>\$410.30</u>	\$123.10

2057

Sidegate.

Sta. 2902-40. Width 66". Depth 62". Length 24 ft. 40%

Lumber 1,798 ft...@	\$25.00	per M	\$44.90	
Carpenter Work ...@	7.00	" "	12.60	
Hauling@	3.00	" "	5.40	
Iron@	2.00	" "	3.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<u>\$92.00</u>	\$36.80

Sidegate.

Sta. 2919-10. Width 46". Depth 58". Length 27 ft. 30%

Lumber 1,457 ft...@	\$25.00	per M	\$36.40	
Carpenter Work ...@	7.00	" "	10.10	
Hauling@	3.00	" "	4.50	
Iron@	2.00	" "	2.90	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<u>\$79.40</u>	\$23.80

Sidegate.

Sta. 2972-22. Width 4 ft. Depth 5 ft. Length 28 ft.

Lumber 1,543 ft....@	\$25.00	per M	\$38.60
Carpenter Work...@	7.00	" "	10.80
Hauling@	3.00	" "	4.50
Iron@	2.00	" "	3.00
Nails@	.30	" "	.50
Earth Work			25.00

\$82.40

\$2

2058

Bridge.

Sta. 2927-78. Width 16 ft. Length 65 ft.

Lumber 7,358 ft....@	\$25.00	per M	\$183.90
Carpenter Work...@	7.00	" "	51.80
Hauling@	3.00	" "	22.20
Iron@	2.00	" "	14.80
Nails@	.30	" "	2.20
Earth Work.....			25.00

\$299.90

\$14

Sidegate.

Sta. 2928-65. Width 66". Depth 88". Length 27 ft. 3

Lumber 2,633 ft....@	\$25.00	per M	\$65.80
Carpenter Work...@	7.00	" "	18.20
Hauling@	3.00	" "	7.80
Iron@	2.00	" "	5.20
Nails@	.30	" "	.80
Earth Work.....			25.00

\$122.80

\$36

Sidegate.

Sta. 2929-18. Width 6 ft. Depth 56". Length 10 ft. 3

Lumber 699 ft....@	\$25.00	per M	\$17.50
Carpenter Work...@	7.00	" "	4.90
Hauling@	3.00	" "	2.10
Iron@	2.00	" "	1.40
Nails@	.30	" "	.50
Earth Work.....			25.00

\$51.40

\$15

2059

Sidegate.

Sta. 2929-89. Width 26". Depth 56". Length 27 ft. 30%.

Lumber 1,481 ft...@	\$25.00 per M	\$37.10
Carpenter Work...@	7.00 " "	10.50
Hauling@	3.00 " "	4.50
Iron@	2.00 " "	3.00
Nails@	.30 " "	.50
Earth Work.....		25.00

\$80.60

\$24.20

Sidegate.

Sta. 2933-08. Width 6 ft. Depth 4 ft. Length 23 ft. 30%.

Lumber 1,489 ft...@	\$25.00 per M	\$37.20
Carpenter Work...@	7.00 " "	10.50
Hauling@	3.00 " "	4.50
Iron@	2.00 " "	3.00
Nails@	.30 " "	.50
Earth Work.....		25.00

\$80.70

\$24.20

Sidegate.

Sta. 2938-37. Width 4 ft. Depth 56". Length 20 ft. 30%.

Lumber 1,186 ft...@	\$25.00 per M	\$29.60
Carpenter Work...@	7.00 " "	8.40
Hauling@	3.00 " "	3.60
Iron@	2.00 " "	2.40
Nails@	.33 " "	.50
Earth Work.....		25.00

\$69.50

\$20.90

2060

Sidegate.

Sta. 2939-91. Width 44". Depth 58". Length 27 ft. 40%.

Lumber 1,457 ft...@	\$25.00 per M	\$36.40
Carpenter Work...@	7.00 " "	10.10
Hauling@	3.00 " "	4.40
Iron@	2.00 " "	2.90
Nails@	.30 " "	.50
Earth Work.....		25.00

\$79.30

\$31.70

Sidegate.

Sta. 2958-61. Width 120". Depth 5 ft. Length 24 ft. 100%

Lumber 2,567 ft....@	\$25.00	per M	\$64.20
Carpenter Work....@	7.00	" "	18.20
Hauling@	3.00	" "	7.80
Iron@	2.00	" "	5.20
Nails@	.30	" "	.80
Earth Work.....			25.00

\$121.20

\$121.00

Sidegate.

Sta. 2958-61. Width 66". Depth 88". Length 27 ft. 30%

Lumber 2,419 ft....@	\$25.00	per M	\$60.10
Carpenter Work....@	7.00	" "	16.90
Hauling@	3.00	" "	7.20
Iron@	2.00	" "	4.80
Nails@	.30	" "	.70
Earth Work.....			25.00

\$114.70

\$34.40

2061

Weir.

Sta. 2958-87. Width 28". Depth 108". Length 40 ft. 80%

Lumber 14,500 ft....@	\$25.00	per M	\$362.50
Carpenter Work....@	7.00	" "	101.50
Hauling@	3.00	" "	43.50
Iron@	2.00	" "	29.00
Nails@	.30	" "	4.30
Earth Work.....			120.00

\$660.80

\$528.60

Sidegate.

Sta. 2963-36. Width 44". Depth 56". Length 17 ft. 20%

Lumber 823 ft....@	\$25.00	per M	\$20.60
Carpenter Work....@	7.00	" "	5.70
Hauling@	3.00	" "	2.40
Iron@	2.00	" "	1.60
Nails@	.30	" "	.50
Earth Work.....			25.00

\$55.80

\$11.20

Sidegate.

Sta. 2972-86. Width 46". Depth 4 ft. Length 26 ft. 40%.

Lumber 1,309 ft...@	\$25.00	per M	\$32.70	
Carpenter Work...@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$73.80	\$29.50

2062

Sidegate.

Sta. 2982-34. Width 44". Depth 50". Length 26 ft. 30%.

Lumber 1,589 ft...@	\$25.00	per M	\$39.70	
Carpenter Work...@	7.00	" "	11.20	
Hauling@	3.00	" "	4.80	
Iron@	2.00	" "	3.20	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$84.40	\$25.30

Sidegate.

Sta. 2986-23. Width 4 ft. Depth 4 ft. Length 24 ft. 40%.

Lumber 1,147 ft...@	\$25.00	per M	\$28.70	
Carpenter Work...@	7.00	" "	7.70	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$67.40	\$27.00

Sidegate.

Sta. 2994-50. Width 66". Depth 6 ft. Length 24 ft. 30%.

Lumber 1,933 ft...@	\$25.00	per M	\$48.30	
Carpenter Work...@	7.00	" "	13.30	
Hauling@	3.00	" "	5.70	
Iron@	2.00	" "	3.80	
Nails@	.30	" "	.60	
Earth Work.....			25.00	
			<hr/>	
			\$96.70	\$29.00

1476 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. vs.

2063

Sidegate.

Sta. 2998-62. Width 74". Depth 80". Length 26 ft. 10%.

Lumber 2,380 ft...@	\$25.00	per M	\$59.50
Carpenter Work...@	7.00	" "	16.80
Hauling@	3.00	" "	7.20
Iron@	2.00	" "	4.80
Nails@	.30	" "	.70
Earth Work.....			25.00

\$104.00

\$10.40

Sidegate.

Sta. 3011-11. Width 60". Depth 60". Length 20 ft. 100%.

Lumber 1,711 ft...@	\$25.00	per M	\$42.80
Carpenter Work...@	7.00	" "	11.90
Hauling@	3.00	" "	5.10
Iron@	2.00	" "	3.40
Nails@	.30	" "	.50
Earth Work.....			25.00

\$88.70

\$88.70

Bridge.

Sta. 3018-92. Width 24 ft. Length 75 ft. 20%.

Lumber 11,902 ft...@	\$25.00	per M	\$297.50
Carpenter Work...@	7.00	" "	83.30
Hauling@	3.00	" "	35.70
Iron@	2.00	" "	23.80
Nails@	.30	" "	3.60
Earth Work.....			25.00

\$468.90

\$93.80

2064

Sidegate.

Sta. 3019-72. Width 66". Depth 70". Length 28 ft. 70%.

Lumber 2,248 ft...@	\$25.00	per M	\$56.20
Carpenter Work...@	7.00	" "	15.40
Hauling@	3.00	" "	6.60
Iron@	2.00	" "	4.40
Nails@	.30	" "	.70
Earth Work.....			25.00

\$108.30

\$75.80

Sidegate.

Sta. 3039-94. Width 4 ft. Depth 42". Length 26 ft. 40%.

Lumber 1,071 ft...@	\$25.00	per M	\$26.80	
Carpenter Work...@	7.00	" "	7.70	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$55.50	\$26.20

Sidegate.

Sta. 3047-24. Width 74". Depth 5 ft. Length 24 ft. 20%.

Lumber 1,853 ft...@	\$25.00	per M	\$46.30	
Carpenter Work...@	7.00	" "	12.60	
Hauling@	3.00	" "	5.40	
Iron@	2.00	" "	3.60	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$93.40	\$18.80

2065

Sidegate.

Sta. 3054-79. Width 3 ft. Depth 5 ft. Length 24 ft. 60%

Lumber 1,271 ft...@	\$25.00	per M	\$31.80	
Carpenter Work...@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$72.90	\$42.70

Sidegate.

Sta. 3059-76. Width 54". Depth 52". Length 26 ft. 60%

Lumber 1,430 ft...@	\$25.00	per M	\$35.70	
Carpenter Work...@	7.00	" "	9.80	
Hauling@	3.00	" "	4.20	
Iron@	2.00	" "	2.80	
Nails@	.30	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$78.00	\$46.80

Weir.

Sta. 3061-13.	Width 18 ft.	Depth 40 ft.	Length 40 ft.	80%
Same as Station 2847-69.....			\$634.90	\$507.90

Bridge.

Sta. 3069-41.	Width 18 ft.	Length 66 ft.	70%
Lumber 7,971 ft...@	\$25.00 per M	\$199.30	
Carpenter Work ..@	7.00 " "	56.00	
Hauling@	3.00 " "	24.00	
Iron@	2.00 " "	16.00	
Nails@	.30 " "	2.40	
Earth Work		25.00	
		<hr/>	
		\$322.70	\$258.90

2066

Measuring Gate.

Sta. 3070-44.	Width 12 ft. 8".	Depth 5 ft.	Length 8 ft.	20%
Lumber 1,637 ft...@	\$25.00 per M	\$40.90		
Carpenter Work ..@	7.00 " "	11.20		
Hauling@	3.00 " "	4.80		
Iron@	2.00 " "	3.20		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$85.60		\$17.10

Sidegate.

Sta. 3070-44.	Width 6 ft.	Depth 66".	Length 27 ft.	30%
Lumber 2,376 ft...@	\$25.00 per M	\$59.40		
Carpenter Work ..@	7.00 " "	16.80		
Hauling@	3.00 " "	7.70		
Iron@	2.00 " "	4.80		
Nails@	.30 " "	.70		
Earth Work		25.00		
		<hr/>		
		\$113.90		\$34.20

Sidegate.

Sta. 3077-77.	Width 64".	Depth 5 ft.	Length 24 ft.	40%
Lumber 1,765 ft...@	\$25.00 per M	\$44.10		
Carpenter Work ..@	7.00 " "	12.60		
Hauling@	3.00 " "	5.40		
Iron@	2.00 " "	3.60		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$91.20		\$36.50

2067

Sidegate.

Sta. 3084-58. Width 68". Depth 82". Length 25 ft. 40%

Lumber 2,304 ft...@	\$25.00	per M	\$57.60	
Carpenter Work ..@	7.00	" "	16.10	
Hauling@	3.00	" "	6.90	
Iron@	2.00	" "	4.60	
Nails@	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$110.90	\$44.40

Sidegate.

Sta. 3096-83. Width 42". Depth 5 ft. Length 23 ft. 30%

Lumber 1,345 ft...@	\$25.00	per M	\$35.60	
Carpenter Work ..@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$74.70	\$22.40

Sidegate.

Sta. 3098-61. Width 44". Depth 50". Length 26 ft. 50%

Lumber 1,292 ft...@	\$25.00	per M	\$32.30	
Carpenter Work ..@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$73.40	\$36.70

2068

Sidegate.

Sta. 3110-32. Width 44". Depth 5 ft. Length 26 ft. 40%

Lumber 1,591 ft...@	\$25.00	per M	\$39.80	
Carpenter Work ..@	7.00	" "	11.20	
Hauling@	3.00	" "	4.80	
Iron@	2.00	" "	3.20	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$84.50	\$33.80

Sidegate.

Sta. 3111-71. Width 44". Depth 52". Length 26 ft. 40%

Lumber 1,261 ft...@	\$25.00	per M	\$31.50	
Carpenter Work ..@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$72.60	\$29.00

Sidegate.

Sta. 3112-73. Width 44". Depth 54". Length 25 ft. 30%

Lumber 1,333 ft...@	\$25.00	per M	\$33.30	
Carpenter Work ..@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$74.40	\$22.30

2069

Sidegate.

Sta. 3116-42. Width 44". Depth 44". Length 26 ft. 30%

Lumber 1,108 ft...@	\$25.00	per M	\$27.70	
Carpenter Work ..@	7.00	" "	7.70	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$66.40	\$19.90

Sidegate.

Sta. 3116-61. Width 42". Depth 40". Length 20 ft. 30%

Lumber 949 ft....@	\$25.00	per M	\$23.70	
Carpenter Work ..@	7.00	" "	7.00	
Hauling@	3.00	" "	3.00	
Iron@	2.00	" "	2.00	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$61.20	\$18.40

Bridge.

Sta. 3126-97.	Width 16 ft.	Length 60 ft.	80%
Lumber 6,561 ft...@	\$25.00 per M	\$164.00	
Carpenter Work ..@	7.00 " "	46.20	
Hauling@	3.00 " "	19.80	
Iron@	2.00 " "	13.20	
Nails@	.30 " "	2.00	
Earth Work		25.00	
		<hr/>	
		\$270.20	\$216.20

2070

Sidegate.

Sta. 3127-24.	Width 4 ft.	Depth 46".	Length 24 ft.	40%
Lumber 1,022 ft...@	\$25.00 per M	\$25.50		
Carpenter Work ..@	7.00 " "	7.00		
Hauling@	3.00 " "	3.00		
Iron@	2.00 " "	2.00		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$63.00		\$25.20

Sidegate.

Sta. 3136-31.	Width 3 ft.	Depth 44".	Length 20 ft.	50%
Lumber 810 ft....@	\$25.00 per M	\$20.20		
Carpenter Work ..@	7.00 " "	5.60		
Hauling@	3.00 " "	2.40		
Iron@	2.00 " "	1.60		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$55.30		\$27.60

Sidegate.

Sta. 3146-54.	Width 66".	Depth 80".	Length 26 ft.	40%
Lumber 2,248 ft...@	\$25.00 per M	\$56.20		
Carpenter Work ..@	7.00 " "	15.40		
Hauling@	3.00 " "	6.60		
Iron@	2.00 " "	4.40		
Nails@	.30 " "	.70		
Earth Work		25.00		
		<hr/>		
		\$108.30		\$43.30

2071

Bridge.

Sta. 3147-06.	Width 24 ft.	Length 36 ft.	50%
Lumber 10,095 ft...@	\$25.00 per M	\$252.40	
Carpenter Work ..@	7.00 " "	70.70	
Hauling@	3.00 " "	30.30	
Iron@	2.00 " "	20.20	
Nails@	.30 " "	3.00	
Earth Work		25.00	
		<hr/>	
		\$401.60	\$200.80

Sidegate.

Sta. 3149-88.	Width 44".	Depth 42".	Length 28 ft.	60%
Lumber 1,237 ft...@	\$25.00 per M	\$30.90		
Carpenter Work ..@	7.00 " "	8.40		
Hauling@	3.00 " "	3.60		
Iron@	2.00 " "	2.40		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$70.80		\$42.50

Sidegate.

Sta. 3161-69.	Width 4 ft.	Depth 2 ft.	Length 24 ft.	30%
Lumber 1,136 ft...@	\$25.00 per M	\$28.40		
Carpenter Work ..@	7.00 " "	7.70		
Hauling@	3.00 " "	3.30		
Iron@	2.00 " "	2.20		
Nails@	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$67.10		\$20.10

2072

Sidegate.

Sta. 3170-04.	Width 66".	Depth 84".	Length 26 ft.	30%
Lumber 2,555 ft...@	\$25.00 per M	\$63.90		
Carpenter Work ..@	7.00 " "	18.20		
Hauling@	3.00 " "	7.80		
Iron@	2.00 " "	5.20		
Nails@	.30 " "	.80		
Earth Work		25.00		
		<hr/>		
		\$120.90		\$36.30

Weir.

Sta. 3170-04. Width 26". Depth 9 ft. Length 42 ft. 80%

Same as Station 2847-69..... \$634.90 \$507.90

Sidegate.

Sta. 3183-12. Width 66". Depth 74". Length 26 ft. 30%

Lumber 2,129 ft...@ \$25.00 per M \$53.20

Carpenter Work ..@ 7.00 " " 14.70

Hauling@ 3.00 " " 6.30

Iron@ 2.00 " " 4.20

Nails@ .30 " " .60

Earth Work 25.00

\$104.00 \$31.20

Sidegate.

Sta. 3183-49. Width 66". Depth 70". Length 29 ft. 80%

Lumber 1,862 ft...@ \$25.00 per M \$46.50

Carpenter Work ..@ 7.00 " " 13.30

Hauling@ 3.00 " " 5.70

Iron@ 2.00 " " 3.80

Nails@ .30 " " .60

Earth Work 25.00

\$94.90 \$75.90

2073 Sidegate.

Sta. 3193-98. Width 46". Depth 5 ft. Length 25 ft. 50%

Lumber 1,453 ft...@ \$25.00 per M \$36.30

Carpenter Work...@ 7.00 " " 9.80

Hauling@ 3.00 " " 4.50

Iron@ 2.00 " " 2.80

Nails@ .30 " " .50

Earth Work 25.00

\$78.90 \$39.40

Sidegate.

Sta. 3209-52. Width 34". Depth 54". Length 23 ft. 30%

Lumber 958 ft...@ \$25.00 per M \$23.70

Carpenter Work ...@ 7.00 " " 7.00

Hauling@ 3.00 " " 3.00

Iron@ 2.00 " " 2.00

Nails@ .30 " " .50

Earth Work 25.00

\$61.40 \$18.40

Sidegate.

Sta. 3215-03. Width 44". Depth 44". Length 25 ft. 40%

Lumber 1,057 ft...@	\$25.00 per M	\$26.40
Carpenter Work ...@	7.00 " "	14.00
Hauling@	3.00 " "	6.00
Iron@	2.00 " "	4.00
Nails@	.30 " "	.60
Earth Work		25.00

\$76.00

\$30.40

2074

Merced County.

Station 3225-00.

Total Cost of Structures.....	\$39,557.00
Total Cost of Depreciation.....	23,419.10
Present Value	<hr/> \$16,137.90

2075

Outside Canal.

Merced County.

Bridge.

Sta. 1036-37. Width 20 ft. Length 10 ft. 30%

Lumber 1,047 ft...@	\$25.00 per M	\$26.20
Carpenter Work ...@	7.00 " "	7.00
Hauling@	3.00 " "	3.00
Iron@	2.00 " "	2.00
Nails@	.30 " "	.50
Earth Work		25.00

\$63.70

\$19.10

Bridge.

Sta. 1036-37. Width 20 ft. Length 84 ft. 30%

Lumber 12,072 ft...@	\$25.00 per M	\$301.80
Carpenter Work ...@	7.00 " "	84.70
Hauling@	3.00 " "	36.30
Iron@	2.00 " "	24.20
Nails@	.30 " "	3.60
Earth Work		25.00

\$475.60

\$142.70

Sidegate.

Sta. 1116-35. Width 10 ft. Depth 50". Length 10 ft. 30%

Lumber 1,096 ft....@	\$25.00	per M	\$27.50	
Carpenter Work ...@	7.00	" "	7.00	
Hauling@	3.00	" "	3.00	
Iron@	2.00	" "	2.00	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$65.00	\$19.50

2076

Sidegate.

Sta. 1116-95. Width 10 ft. Depth 7 ft. Length 30 ft. 20%

Lumber 3,957 ft....@	\$25.00	per M	\$98.90	
Carpenter Work ...@	7.00	" "	28.00	
Hauling@	3.00	" "	12.00	
Iron@	2.00	" "	8.00	
Nails@	.30	" "	1.20	
Earth Work			25.00	
			<hr/>	
			\$173.10	\$34.60

Sidegate.

Sta. 1117-61. Width 10 ft. Depth 54". Length 10 ft. 30%

Lumber 1,112 ft....@	\$25.00	per M	\$28.10	
Carpenter Work ...@	7.00	" "	7.00	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$66.80	\$20.00

Weir.

Sta. 1118-51. Width 18 ft. Depth 74". Length 60 ft. 30%

Lumber 16,200 ft....@	\$25.00	per M	\$405.00	
Carpenter Work ...@	7.00	" "	113.40	
Hauling@	3.00	" "	48.60	
Iron@	2.00	" "	32.40	
Nails@	.30	" "	4.90	
Earth Work			120.00	
			<hr/>	
			\$724.30	\$217.30

2077

Outside Canal.

Sidegate.

Sta. 1149-66. Width 72". Depth 60". Length 20 ft. 20%

Lumber 1935 ft....at	\$25.00 per M	\$48.40
Carpenter Work ...at	7.00 " "	13.30
Hauling .....at	3.00 " "	5.70
Iron .....at	2.00 " "	3.80
Nails .....at	.30 " "	.60
Earth Work		25.00

\$96.80

\$19.40

Bridge.

Sta. 1151. Width 18 ft. Length 27 ft. 40%

Lumber 2504 ft....at	\$25.00 per M	\$62.60
Carpenter Work ...at	7.00 " "	17.50
Hauling .....at	3.00 " "	7.50
Iron .....at	2.00 " "	5.00
Nails .....at	.30 " "	.80
Earth Work		25.00

\$118.40

\$47.40

Gate in Side Ditch.

Sta. 1154. Width 10 ft. Depth 4 ft. Length 10 ft. 30%

Lumber 900 ft....at	\$25.00 per M	\$22.50
Carpenter Work ...at	7.00 " "	6.30
Hauling .....at	3.00 " "	2.70
Iron .....at	2.00 " "	1.80
Nails .....at	.30 " "	.50
Earth Work		25.00

\$58.80

\$17.60

2078

Gate in Side Ditch.

Type D. Same as 1154..... Value \$58.50 Depr. \$17.60

Bridge.

Sta. 1205-04. Width 14 ft. Length 100 ft. 80%

Lumber 4874 ft....at	\$25.00 per M	\$121.90
Carpenter Work ...at	7.00 " "	34.30
Hauling .....at	3.00 " "	14.70
Iron .....at	2.00 " "	9.80
Nails .....at	.30 " "	1.50
Earth Work		25.00

\$207.20

\$41.40

Bridge.

Sta. 1205-89.	Width 18 ft.	Length 10 ft.	30%
Lumber 997 ft. at	\$25.00 per M	\$24.90	
Carpenter Work ... at	7.00 " "	7.00	
Hauling at	3.00 " "	3.00	
Iron at	2.00 " "	2.00	
Nails at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$62.40	\$18.70

Sidegate.

Sta. 1206-97.	Width 10 ft.	Depth 72".	Length 45 ft.	30%
Lumber 30003 ft. at	\$25.00 per M		\$75.10	
Carpenter Work ... at	7.00 " "		21.00	
Hauling at	3.00 " "		9.00	
Iron at	2.00 " "		6.00	
Nails at	.30 " "		.90	
Earth Work			25.00	
			<hr/>	
			\$137.00	\$41.10

2079

Gate in Side Ditch.

Sta. 1207-43. Type D.

Same as Sta. 1154. Value \$58.00. Depr. \$11.80 20%

Weir Type O-S.

Sta. 1208-43.	Width 18 ft.	Depth 6 ft.	Length 60 ft.	20%
Lumber 16070 ft. at	\$25.00 per M		\$401.70	
Carpenter Work ... at	7.00 " "		112.70	
Hauling at	3.00 " "		48.30	
Iron at	2.00 " "		32.20	
Nails at	.30 " "		4.80	
Earth Work			120.00	
			<hr/>	
			\$719.70	\$143.90

Bridge.

Sta. 1233-91.	Width 20 ft.	Length 18 ft.	40%
Lumber 1885 ft. at	\$25.00 per M	\$47.10	
Carpenter Work ... at	7.00 " "	13.30	
Hauling at	3.00 " "	5.70	
Iron at	2.00 " "	3.80	
Nails at	.30 " "	.60	
Earth Work		25.00	
		<hr/>	
		\$95.50	\$38.20

Bridge.

Sta. 1269-02.	Width 14 ft.	Length 14 ft.	60%
Lumber 1045 ft. at	\$25.00 per M	\$26.10	
Carpenter Work at	7.00 " "	7.30	
Hauling at	3.00 " "	3.10	
Iron at	2.00 " "	2.10	
Nails at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$64.10	\$34.50

2080

Sidegate in Side Di-

Sta. 1275-75.	Width 66".	Depth 54".	Length 24 ft.	100%
Lumber 1500 ft. at	\$25.00 per M	\$37.50		
Carpenter Work at	7.00 " "	10.50		
Hauling at	3.00 " "	4.50		
Iron at	2.00 " "	3.00		
Nails at	.30 " "	.50		
Earth Work		25.00		
		<hr/>		
		\$81.00		\$81.00

Gate in Side Ditch.

Sta. 1277-10.	Type D.	Same as Sta. 1207-43.	20%
		\$58.80	Dpr. \$11.80

Sidegate from Side Ditch.

Sta. 1290-50 (For private use)	30%
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Gate in Side Ditch.

Sta. 1290-92.	Type D.	Same as 1207-43	30%
		Value \$58.80	Depr. \$17.60

Bridge.

Sta. 1320-80.	Width 20 ft.	Length 16 ft.	49%
Lumber 1676 ft. at	\$25.00 per M	\$41.00	
Carpenter Work at	7.00 " "	11.90	
Hauling at	3.00 " "	5.10	
Iron at	2.00 " "	3.40	
Nails at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$87.80	\$35.10

2081

Sidegate.

Sta. 1322-62. Width 72". Depth 64". Length 24 ft. 20%

Lumber 2220 ft....at	\$25.00 per M	\$55.50
Carpenter Work ....at	7.00 " "	50.50
Hauling .....at	3.00 " "	6.60
Iron .....at	3.00 " "	4.40
Nails .....at	.30 " "	.60
Earth Work		25.00

\$107.60 \$21.52

Bridge.

Sta. 1349-70. Width 22 ft. Length 10 ft. 60%

Lumber 1197 ft....at	\$25.00 per M	\$29.90
Carpenter Work ....at	7.00 " "	8.40
Hauling .....at	3.00 " "	3.60
Iron .....at	2.00 " "	2.40
Nails .....at	.30 " "	.50
Earth Work		25.00

\$69.80 \$41.90

Bridge.

Sta. 1349-20. Width 20 ft. Length 80 ft. %0%

Lumber 8380 ft....at	\$25.00 per M	\$209.50
Carpenter Work ....at	7.00 " "	58.80
Hauling .....at	3.00 " "	25.20
Iron .....at	2.00 " "	16.80
Nails .....at	.... " "	2.60
Earth Work		25.00

\$337.90 \$168.90

2082

Gate in Side Ditch.

Sta. 1372-26. Type D. Same as Sta. 1207-43. 20%.

Value \$58.50. Depr. \$11.70

Sidegate.

Sta. 1373-57. Width 10 ft. Depth 74". Length 22-. 20%.

Lumber 3,568 ft....at	\$25.00 per M	\$89.20
Carpenter Work ....at	7.00 " "	25.20
Hauling .....at	3.00 " "	10.80
Iron .....at	2.00 " "	7.20
Nails .....at	.30 " "	1.10
Earth Work		25.00

\$158.50 \$31.70

Weir. Type O-S.

Sta. 1375-12.	Width 10 ft.	Depth —.	20%.
Lumber 12,666 ft...at	\$25.00 per M	\$316.60	
Carpenter Work....at	7.00 " "	88.90	
Hauling .....at	3.00 " "	38.10	
Iron .....at	2.00 " "	25.40	
Nails .....at	.30 " "	3.80	
Earth Work.....		120.00	
		<hr/>	
		\$529.80	\$118.60

Sidegate in Side Ditch.

Sta. 1390-46.	Type D.	Same as 1207-43.	20%.
		Value \$58.50.	Depr. \$11.70

2083

Bridge.

Sta. 1408-51.	Width 16 ft.	Length 16 ft.	80%.
Lumber 1,340 ft...at	\$25.00 per M	\$33.50	
Carpenter Work....at	7.00 " "	9.40	
Hauling .....at	3.00 " "	4.00	
Iron .....at	2.00 " "	2.70	
Nails .....at	.30 " "	.50	
Earth Work.....		25.00	
		<hr/>	
		\$75.10	\$60.00

Gate in Side Ditch.

Sta. 1423-70.	Width 10 ft.	Depth 56".	Length 8 ft.	40%.
Lumber 1,110 ft...at	\$25.00 per M	\$27.70		
Carpenter Work....at	7.00 " "	7.70		
Hauling .....at	3.00 " "	3.30		
Iron .....at	2.00 " "	2.20		
Nailsat	.30 " "	.50		
Earth Work.....		25.00		
		<hr/>		
		\$66.40		\$26.60

Sidegate.

Sta. 1440-65 (for pumping).	Obsolete.	60%.
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Bridge in Side Ditch.

Sta. 1445-49. Width 16 ft. Depth 3 ft. Length 8 ft. 20%.

Lumber 2,525 ft....at	\$25.00	per M	\$63.10	
Carpenter Work....at	7.00	" "	17.50	
Hauling .....at	3.00	" "	7.50	
Iron .....at	2.00	" "	5.00	
Nails .....at	.30	" "	.70	
Earth Work.....			25.00	
			<hr/>	
			\$118.20	\$23.80

2084 Sidegate.

Sta. 1456-37. Width 10 ft. Depth 67". Length 24 ft. 20%.

Lumber 2,596 ft....at	\$25.00	per M	\$64.90	
Carpenter Work....at	7.00	" "	18.20	
Hauling .....at	3.00	" "	7.80	
Iron .....at	" .00	" "	5.20	
Nails .....at	.30	" "	.80	
Earth Work.....			25.00	
			<hr/>	
			\$121.90	\$24.40

Bridge.

Sta. 1459-50. Width 14 ft. Length 88 ft. 20%.

Lumber 8,474 ft....at	\$25.00	per M	\$211.90	
Carpenter Work....at	7.00	" "	59.50	
Hauling .....at	3.00	" "	25.50	
Iron .....at	2.00	" "	17.00	
Nails .....at	2.00	" "	2.50	
Earth Work.....			25.00	
			<hr/>	
			\$341.40	\$68.30

Gate in Side Ditch.

Sta. 1462-97. Width 48". Depth 38". Length 42". 20%.

Lumber 241 ft....at	\$25.00	per M	\$6.00	
Carpenter Work....at	7.00	" "	1.70	
Hauling .....at	3.00	" "	.70	
Iron .....at	2.00	" "	.50	
Nails .....at	2.00	" "	.50	
Earth Work.....			25.00	
			<hr/>	
			\$34.40	\$6.90

2085

Bridge.

Sta. 1471-78.

Width 24 ft.

Length 24 ft.

Lumber 1,676 ft....at	\$25.00	per M	\$41.90
Carpenter Work....at	7.00	" "	11.90
Hauling .....at	3.00	" "	5.10
Iron .....at	2.00	" "	3.40
Nails .....at	.30	" "	.50
Earth Work.....			25.00

\$87.80

\$26.20

Bridge.

Sta. 1471-81.

Width 24 ft.

Length 82 ft.

20%.

Lumber 12,742 ft....at	\$25.00	per M	\$318.50
Carpenter Work....at	7.00	" "	88.90
Hauling .....at	3.00	" "	38.10
Iron .....at	2.00	" "	25.40
Nails .....at	.30	" "	3.80
Earth Work.....			25.00

\$499.70

\$119.90

Sidegate in Side Ditch.

Sta. 1511-72.

Width 10 ft.

Depth 54".

Length 10 ft.

20%.

Lumber 1,110 ft....at	\$25.00	per M	\$27.80
Carpenter Work....at	7.00	" "	7.70
Hauling .....at	3.00	" "	3.30
Iron .....at	2.00	" "	2.20
Nails .....at	.30	" "	.50
Earth Work.....			25.00

\$66.50

\$13.30

2086

Sidegate.

Sta. 1533-53.

Width 10 ft.

Depth 72".

Length 27 ft.

20%.

Lumber 2,643 ft....at	\$25.00	per M	\$66.70
Carpenter Work....at	7.00	" "	18.20
Hauling .....at	3.00	" "	7.80
Iron .....at	2.00	" "	5.20
Nails .....at	.30	" "	.80
Earth Work.....			25.00

\$123.70

\$24.70

Weir. Type O-S.

Sta. 1515-15. Same as Sta. 1375-12.

Value \$592.80. Depr. 118.80. 20%

Gate in Side Ditch.

Sta. 1522-76. Same as Sta. 1423-70.

30%.

Value \$26.40 Depr. \$19.90

Side in Side Ditch.

Sta. 1524-62. Same as Sta. 1423-70.

Value \$66.40 Depr. \$13.30

Gate in Side Ditch.

Sta. 1533-83. Width 68". Depth 36". Length 7 ft. 20%.

Lumber 732 ft....at	\$25.00	per M	\$18.30
Carpenter Work....at	7.00	" "	5.10
Hauling .....at	3.00	" "	2.20
Iron .....at	2.00	" "	1.50
Nails .....at	.30	" "	.50
Earth Work.....			25.00

\$52.60

\$10.50

2087

Bridge.

Sta. 1550-64. Width 24 ft. Length 16 ft. 40%

Lumber 1,960 —...at	\$25.00	per M	\$49.00
Carpenter Work ...at	7.00	" "	14.00
Hauling .....at	3.00	" "	6.00
Iron .....at	2.00	" "	4.00
Nails .....at	.30	" "	.60
Earth Work			25.00

\$98.60

\$39.50

Bridge.

Sta. 150-72. Width 24 ft. Length 80 ft.

Lumber 12,503 ft....at	\$25.00	per M	\$312.60
Carpenter Work ...at	7.00	" "	87.50
Hauling .....at	3.00	" "	37.50
Iron .....at	2.00	" "	25.00
Nails .....at	.30	" "	3.80
Earth Work			25.00

\$491.40

\$196.60

Sidegate in Side Ditch.

Sta. 1559-85. Type D. Same as Sta. 1207-43. 30%

Value \$58.80. Depr. \$17.70

Gate in Side Ditch. No. O.-S. 32-B.

Sta. 1573-52. Width 6 ft. Depth 4 ft. Length 6 ft. 20%

Lumber 582 ft.....at	\$25.00 per M	\$14.50	
Carpenter Work ...at	7.00 " "	4.10	
Hauling .....at	3.00 " "	1.60	
Iron .....at	2.00 " "	1.20	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$46.90	\$9.40

2088

Sidegate.

Sta. 1583-70. Width 66". Depth 54". Length 24 ft. New.

Lumber 1,849 ft...at	\$25.00 per M	\$41.20	
Carpenter Work ...at	7.00 " "	11.20	
Hauling .....at	3.00 " "	4.80	
Iron .....at	2.00 " "	3.20	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$85.90	\$85.90

Bridge, Co. Rd.

Sta. 1688-63. Width 24 ft. Length 104 ft. 60%

Lumber 16,007 — .at	\$25.00 per M	\$402.70	
Carpenter Work ...at	7.00 " "	112.70	
Hauling .....at	3.00 " "	48.30	
Iron .....at	2.00 " "	32.80	
Nails .....at	.30 " "	4.80	
Earth Work		25.00	
		<hr/>	
		\$625.70	\$312.80

Bridge in Side Ditch.

Sta. 1588-76. Width 32 ft. Length 18 ft. 50%

Lumber 1,164 ft...at	\$25.00 per M	\$29.10	
Carpenter Work ...at	7.00 " "	8.40	
Hauling .....at	3.00 " "	3.60	
Iron .....at	2.00 " "	2.40	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$69.00	\$34.50

2089

Sidegate in Side Ditch.

Sta. 1797-91. Type D. Same as Sta. 1207-43. 30%

Value \$58.80. Depr. \$17.60

Gate in Side Ditch.

Sta. 1609-30. Type D. Same as Sta. 1207-43. 30%

Value \$58.80. Depr. \$17.60

Gate in Side Ditch.

Sta. 1639-58. Type D. Same as Sta. 1207-43. 30%

Value \$58.80. Depr. \$17.60

Sidegate.

Sta. 1640-72. Width 10 ft. Depth 72". Length 28 ft. 30%

Lumber 3,520 —	at \$25.00	per M	\$88.00
Carpenter Work	7.00	" "	24.50
Hauling	3.00	" "	10.50
Iron	2.00	" "	7.00
Nails . . . . .	.30	" "	1.00
Earth Work			25.00

\$156.00

\$46.80

Weir. Type O-S.

Sta. 1641-45. Same as Sta. 1375-12. 20%

Value \$592.80. Depr. \$237.20

Gate in Side Ditch.

Sta. 1641-52. Type D. Same as Sta. 1207-43. 20%

Value \$58.80. Depr. \$11.80

2090

Sidegate.

Sta. 1669-80. Width 36". Depth 48". Length 20 ft. New.

Lumber 884 ft.	at \$25.00	per M	\$22.10
Carpenter Work	7.00	" "	6.20
Hauling	3.00	" "	2.60
Iron	2.00	" "	1.80
Nails . . . . .	.30	" "	.50
Earth Work			25.00

\$58.20

\$58.20

Sidegate.

Sta. 1682-46. Width 10 ft. Depth 64". Length 24 ft. 20%

Lumber 2,729 ft....at	\$25.00	per M	\$68.20
Carpenter Work ...at	7.00	" "	18.90
Hauling .....at	3.00	" "	8.10
Iron .....at	2.00	" "	5.40
Nails .....at	.30	" "	.80
Earth Work			25.00

\$126.40

\$25.30

Sidegate.

Sta. 1690-67. Width 48". Depth 48". Length 20 ft. 20%

Lumber 800 ft....at	\$25.00	per M	\$20.00
Carpenter Work ...at	7.00	" "	5.60
Hauling .....at	3.00	" "	2.40
Iron .....at	2.00	" "	1.60
Nails .....at	.30	" "	.50
Earth Work			25.00

\$55.10

\$16.50

2091

Sidegate.

Sta. 1700-49. Width 6 ft. Depth 54". Length 20 ft. 20%

Lumber 1,432 ft....at	\$25.00	per M	\$35.80
Carpenter Work ...at	7.00	" "	10.00
Hauling .....at	3.00	" "	4.30
Iron .....at	2.00	" "	2.90
Nails .....at	.30	" "	.50
Earth Work			25.00

\$78.50

\$15.70

Gate in Side Ditch.

Sta. 1708-51. Width 8 ft. Depth 62". Length 12 ft. 30%

Lumber 1,228 ft....at	\$25.00	per M	\$30.70
Carpenter Work ...at	7.00	" "	8.50
Hauling .....at	3.00	" "	3.60
Iron .....at	2.00	" "	2.40
Nails .....at	.30	" "	.50
Earth Work			25.00

\$70.70

\$21.20

Bridge, Co. Rd.

Sta. 1710-45.	Width 24 ft.	Length 104 ft.	20%
Lumber 19,030 ft...at	\$25.00 per M	\$475.70	
Carpenter Work ...at	7.00 " "	133.00	
Hauling .....at	3.00 " "	57.00	
Iron .....at	2.00 " "	38.00	
Nails .....at	.30 " "	5.70	
Earth Work		25.00	
		<hr/>	
		\$734.40	\$146.90

2092

Bridge.

Sta. 1710-74.	Width 30 ft.	Length 12 ft.	20%
Lumber 1,437 ft...at	\$25.00 per M	\$35.90	
Carpenter Work ...at	7.00 " "	10.00	
Hauling .....at	3.00 " "	4.30	
Iron .....at	2.00 " "	2.80	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$78.50	\$15.70

Sidegate.

Sta. 1718-91.	Width 6 ft.	Depth 54".	Length 20 ft.	20%
Lumber 1,172 ft...at	\$25.00 per M		\$29.30	
Carpenter Work ...at	7.00 " "		8.40	
Hauling .....at	3.00 " "		3.60	
Iron .....at	2.00 " "		2.40	
Nails .....at	.30 " "		.50	
Earth Work			25.00	
			<hr/>	
			\$69.20	\$13.80

Gate in Side Ditch.

Sta. 1721-58.	Width 10 ft.	Depth 54".	Length 10 ft.	30%
Lumber. Same as Sta. 1207-43.			Value \$58.80, Depr. \$17.60	

2093

Sidegate.

Sta. 1725-70.	Width 10 ft.	Depth 60".	Length 28 ft.	30%
Lumber 3,445 ft...at	\$25.00 per M		\$86.10	
Carpenter Work ...at	7.00 " "		23.80	
Hauling .....at	3.00 " "		10.20	
Iron .....at	2.00 " "		6.80	
Nails .....at	.30 " "		.70	
Earth Work			25.00	
			<hr/>	
			\$152.60	\$45.80

Gate in Side Ditch.

Sta. 1732-44. Width 10 ft. Depth 54". Length 20 ft. 20%

Same as Sta. 1423-70. Value \$65.40. Depr. \$12.90

Sidegate in Side Ditch.

Sta. 1738-03. Width 10 ft. Depth 48". Length 9 ft. 40%

Same as Sta. 1270-43. Value \$58.80. Depr. \$23.50

Bridge.

Sta. 1744-95. Width 14 ft. Length 24 ft.

Lumber 1,794 ft....at	\$25.00	per M	\$44.90	
Carpenter Work ...at	7.00	" "	12.60	
Hauling .....at	3.00	" "	5.40	
Iron .....at	2.00	" "	3.60	
Nails .....at	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$92.00	\$55.20

2094

Bridge.

Sta. 1744-95. Width 14 ft. Length 84 ft. 60%

Lumber 9,497 ft....at	\$25.00	per M	\$239.90	
Carpenter Work ...at	7.00	" "	67.20	
Hauling .....at	3.00	" "	28.60	
Iron .....at	2.00	" "	19.20	
Nails .....at	.30	" "	2.80	
Earth Work			25.00	
			<hr/>	
			\$382.70	\$229.90

Sidegate.

Sta. 1756-60. Width 6 ft. Depth 48". Length 20 ft. 20%

Lumber 1,477 ft....at	\$25.00	per M	\$36.90	
Carpenter Work ...at	7.00	" "	10.50	
Hauling. ....at	3.00	" "	4.50	
Iron .....at	2.00	" "	3.00	
Nails .....at	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$80.40	\$16.10

Sidegate.

Sta. 1858-27. Width 8 ft. Depth 72". Length 24 ft. 30%

Lumber 2,859 ft...at	\$25.00	per M	\$71.50	
Carpenter Work ...at	7.00	" "	19.60	
Hauling .....at	3.00	" "	8.40	
Iron .....at	2.00	" "	5.60	
Nails .....at	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$130.90	\$39.30

2095

Sidegate.

Sta. 1775-37. Width 14 ft. Depth 72". Length 30 ft. 20%

Lumber 4,055 ft...at	\$25.00	per M	\$101.40	
Carpenter Work ...at	7.00	" "	28.00	
Hauling .....at	3.00	" "	12.00	
Iron .....at	2.00	" "	8.00	
Nails .....at	.30	" "	1.20	
Earth Work			25.00	
			<hr/>	
			\$175.60	\$35.10

Weir. Type, O-S.

Sta. 1776-46. 20%

Lumber 12,666 ft...at	\$25.00	per M	\$316.70	
Carpenter Work ...at	7.00	" "	88.20	
Hauling .....at	3.00	" "	37.80	
Iron .....at	2.00	" "	25.20	
Nails .....at	.30	" "	3.80	
Earth Work			120.00	
			<hr/>	
			\$591.70	\$118.30

Two Weir Across Los Banos Creek.

Sta. 1780-45. Width 24 ft. Depth 14 ft. 5" W. of C. 100 ft. 30%

Lumber 43,847 ft...at	\$25.00	per M	\$1,096.20	
Carpenter Work ...at	7.00	" "	306.90	
Hauling .....at	3.00	" "	131.50	
Iron .....at	2.00	" "	87.60	
Nails .....at	.30	" "	13.10	
Earth Work			120.00	
			<hr/>	
			\$1,755.30	\$526.70
Total for two Weirs.....			\$3,510.60	\$1,053.40

2096

Canal Camp.

30%

House	\$350.00	
Barn	175.00	
Bunkhouse	75.00	
Outbuildings	75.00	
Fences	75.00	
	<hr/>	
	\$750.00	\$225.00

Weir.

Sta. 1781-44. Width 18 ft. Depth 7 ft. 8". Length 40 ft. 30%

Lumber 12,914 ft...at	\$25.00 per M	\$322.90	
Carpenter Work ...at	7.00 " "	90.30	
Hauling	3.00 " "	38.70	
Iron	2.00 " "	25.80	
Nails .....	.30 " "	3.90	
Earth Work		120.00	
		<hr/>	
		\$601.60	\$180.50

Bridge.

Sta. 1784-20. Width 12 ft. Length 42 ft.

Lumber 2,887 ft...at	\$25.00 per M	\$72.20	
Carpenter Work ...at	7.00 " "	20.30	
Hauling	3.00 " "	8.70	
Iron	2.00 " "	5.80	
Nails .....	.30 " "	.90	
Earth Work		25.00	
		<hr/>	
		\$132.90	\$53.20

2097

Sidegate.

Sta. 1804-19. Width 10 ft. Depth 74". Length 20 ft. 40%

Lumber 2,468 ft...at	\$25.00 per M	\$61.70	
Carpenter Work ...at	7.90 " "	17.50	
Hauling	3.00 " "	7.50	
Iron	2.00 " "	5.00	
Nails .....	.30 " "	.80	
Earth Work		25.00	
		<hr/>	
		\$117.50	\$47.00

Bridge.

Sta. 1833-26.	Width 18 ft.	Length 5 ft.	30%
Lumber 463 ft....at	\$25.00 per M	\$11.60	
Carpenter Work ...at	7.00 " "	3.30	
Hauling .....at	3.00 " "	1.40	
Iron .....at	2.00 " "	.90	
Nails .....at	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$42.20	\$12.70

Bridge.

Sta. 1833-26.	Width 16 ft.	Length 78 ft.	20%
Lumber 8,580 ft....at	\$25.00 per M	\$214.50	
Carpenter Work ...at	7.00 " "	60.20	
Hauling .....at	3.00 " "	25.80	
Iron .....at	2.00 " "	17.20	
Nails .....at	.30 " "	2.60	
Earth Work		25.00	
		<hr/>	
		\$345.30	\$79.10

2098

Sidegate.

Sta. 1833-81.	Width 10 ft.	Depth 86".	Length 28 ft.	30%
Lumber 3,443 ft....at	\$25.00 per M		\$86.10	
Carpenter Work ...at	7.00 " "		23.80	
Hauling .....at	3.00 " "		10.20	
Iron .....at	2.00 " "		8.80	
Nails .....at	.30 " "		1.00	
Earth Work			25.00	
			<hr/>	
			\$152.90	\$45.90

Bridge.

Sta. 1880-81.	Width 16 ft.	Length 104 ft.	20%
Lumber 11,270 ft...at	\$25.00 per M	\$281.70	
Carpenter Work ...at	7.00 " "	79.10	
Hauling .....at	3.00 " "	33.90	
Iron .....at	2.00 " "	22.60	
Nails .....at	.30 " "	3.40	
Earth Work		25.00	
		<hr/>	
		\$445.70	\$89.10

Sidegate.

Sta. 1886-74. Width 10 ft. Depth 90". Length 28 ft. 30%

Lumber 3,727 ft....at	\$25.00 per M	\$93.20
Carpenter Work ...at	7.00 " "	25.90
Hauling .....at	3.00 " "	11.10
Iron .....at	2.00 " "	7.40
Nails .....at	.30 " "	1.10
Earth Work		25.00

\$163.70

\$49.10

2099

Bridge.

Sta. 1897-34. Width 16 ft. Length 100 ft. 20%

Lumber 10935 ft....at	\$25.00 per M	\$273.40
Carpenter Work ...at	7.00 " "	76.30
Hauling .....at	3.00 " "	32.70
Iron .....at	2.00 " "	21.80
Nails .....at	.30 " "	3.30
Earth Work		25.00

\$432.50

\$129.70

Sidegate.

Sta. 1936-24. Width 10 ft. Depth 90". Length 28 ft. 20%

Lumber 4102 ft....at	\$25.00 per M	\$202.50
Carpenter Work ...at	7.00 " "	28.70
Hauling .....at	3.00 " "	12.30
Iron .....at	2.00 " "	8.20
Nails .....at	.30 " "	1.20
Earth Work		25.00

\$177.90

\$35.60

Bridge.

Sta. 1958-48. Width 24 ft. Length 86 ft. 30%

Lumber 13951 ft....at	\$25.00 per M	\$348.80
Carpenter Work....at	7.00 " "	97.30
Hauling .....at	3.00 " "	41.70
Iron .....at	2.00 " "	27.80
Nails .....at	.30 " "	4.10
Earth Work		25.00

\$544.70

\$163.40

2100

Sidegate for Spillway.

Sta. 2040-73. Width 20 ft. Depth 140". Length 24 ft. 20%

Lumber 7756 ft. at	\$25.00	per M	\$193.90	
Carpenter Work at	7.00	" "	53.90	
Hauling at	3.00	" "	23.10	
Iron at	2.00	" "	15.40	
Nails at	.30	" "	2.30	
Earth Work			25.00	
			<hr/>	
			\$313.60	\$62.70

Bridge.

Sta. 2046-24. Width 20 ft. Length 60 ft. New.

Lumber 8249 at	\$25.00	per M	\$206.20	
Carpenter Work at	7.00	" "	57.40	
Hauling at	3.00	" "	24.60	
Iron at	2.00	" "	16.40	
Nails at	.30	" "	2.50	
Earth Work			25.00	
			<hr/>	
			\$332.10	\$332.10

Bridge.

Sta. 2046-60. Width 12 ft. Length 48 ft. 30%

Lumber 4608 ft. at	\$25.00	per M	\$115.20	
Carpenter Work at	7.00	" "	32.20	
Hauling at	3.00	" "	13.80	
Iron at	2.00	" "	9.20	
Nails at	.30	" "	1.40	
Earth Work			25.00	
			<hr/>	
			\$196.80	\$59.10

2101

Sidegate.

Sta. 2048-72. Width 10 ft. Depth 92". Length 20 ft. 30%

Lumber 3814 ft. at	\$25.00	per M	\$95.40	
Carpenter Work at	7.00	" "	26.60	
Hauling at	3.00	" "	11.40	
Nails at	.30	" "	1.10	
Earth Work			25.00	
			<hr/>	
			\$167.10	\$50.10

Weir.

Sta. 2050-78. Width 14 ft. Depth 48". Length 40 ft. 20%

Lumber 12648 ft....at	\$25.00	" "	\$316.20	
Carpenter Work....at	7.00	" "	88.20	
Hauling .....at	3.00	" "	37.80	
Iron .....at	2.00	" "	25.20	
Nails .....at	.30	" "	3.80	
Earth Work			120.00	
			<hr/>	
			\$481.20	\$96.20

Sidegate.

Sta. 2109-66. Width 67". Depth 84". Length 20 ft. 20%

Lumber 2331 ft....at	\$25.00	per M	\$58.20	
Carpenter Work ....at	7.00	" "	16.10	
Hauling .....at	3.00	" "	6.90	
Iron .....at	2.00	" "	4.40	
Nails .....at	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$111.30	\$22.30

2102

Sidegate.

Sta. 2118-34. Width 10 ft. Depth 72". Length 28 ft. 20%

Lumber 2134 ft....at	\$25.00	per M	\$78.10	
Carpenter Work ....at	7.00	" "	21.70	
Hauling .....at	3.00	" "	9.30	
Iron .....at	2.00	" "	6.20	
Nails .....at	.30	" "	.90	
Earth Work			25.00	
			<hr/>	
			\$141.20	\$28.20

Bridge.

Sta. 2137-03. Width 14 ft. Length 54 ft. 80%

Lumber 4984 ft....at	\$25.00	per M	\$124.80	
Carpenter Work ....at	7.00	" "	35.00	
Hauling .....at	3.00	" "	15.00	
Iron .....at	2.00	" "	10.00	
Nails .....at	.30	" "	1.50	
Earth Work			25.00	
			<hr/>	
			\$211.10	\$168.90

Gate in Side Ditch. Type E.

Sta. 2155-97. Width 102". Depth 40". Length 88". 30%

Lumber 760 ft.	at \$25.00 per M	\$19.00	
Carpenter Work	at 7.00 " "	5.60	
Hauling	at 3.00 " "	2.10	
Iron	at 2.00 " "	1.40	
Nails	at .30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$53.60	\$16.10

2103 Sidegate.

Sta. 2157-91. Width 10 ft. Depth 72". Length 26 ft. 30%

Lumber 3046 ft.	at \$25.00 per M	\$85.10	
Carpenter Work	at 7.00 " "	23.80	
Hauling	at 3.00 " "	10.20	
Iron	at 2.00 " "	6.80	
Nails	at .30 " "	1.00	
Earth Work		25.00	
		<hr/>	
		\$151.00	\$45.60

Gate in Side Ditch.

Sta. 2168-99. Type E. Same as Sta. 2155-97. 30%

Value \$53.60 Depr. 16.10

Gate in Side Ditch.

Sta. 2178-79. Type E. Same as Sta. 2155-97. 30%

Value \$53.60 Depr. 16.10

Sidegate.

Sta. 2193-71. Width 72". Depth 72". Length 26 ft. 20%

Lumber 2311 ft.	at \$25.00 per M	\$57.80	
Carpenter Work	at 7.00 " "	16.40	
Hauling	at 3.00 " "	6.90	
Iron	at 2.00 " "	4.60	
Nails	at .30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$111.40	\$22.30

1506 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

2104

Bridge.

Sta. 2217-85.	Width 24 ft.	Length 52 ft.	30%
Lumber 8,419 ft.@	\$25.00 per M	\$210.50	
Carpenter Work@	7.00 " "	58.80	
Hauling@	3.00 " "	25.20	
Iron@	2.00 " "	16.80	
Nails@	.30 " "	2.50	
Earth Work		25.00	
		<hr/>	
		\$338.80	\$101.60

Sidegate.

Sta. 2223-76.	Width 10 ft.	Depth 62".	Length 26 ft.	30%
Lumber 2,468 ft.@	\$25.00 per M	\$61.70		
Carpenter Work@	7.00 " "	17.50		
Hauling@	3.00 " "	7.50		
Iron@	2.00 " "	5.00		
Nails@	.30 " "	.70		
Earth Work		25.00		
		<hr/>		
		\$117.40		\$35.20

Weir.

Sta. 2241-00.	Width 16 ft.	Depth 78".	Length 40 ft.	20%
Lumber 12,724 ft.@	\$25.00 per M	\$318.10		
Carpenter Work@	7.00 " "	88.90		
Hauling@	3.00 " "	38.10		
Iron@	2.00 " "	25.40		
Nails@	.30 " "	3.80		
Earth Work		120.00		
		<hr/>		
		\$594.30		\$118.90

2105

Weir.

Sta. 2243-91.	Width 20 ft.	Depth 10 ft.	Length 60 ft.	30%
Lumber 19,812 ft.@	\$25.00 per M	\$495.30		
Carpenter Work@	7.00 " "	138.60		
Hauling@	3.00 " "	59.40		
Iron@	2.00 " "	39.60		
Nails@	.30 " "	5.90		
Earth Work		120.00		
		<hr/>		
		\$858.80		\$257.60

Weir.

Sta. 2252-17. Width 16 ft. Depth 7 ft. Length 40 ft. 20%

Lumber 12,648 ft. . . @	\$25.00	per M	\$316.20	
Carpenter Work . . . @	7.00	" "	88.20	
Hauling @	3.00	" "	37.80	
Iron @	2.00	" "	25.20	
Nails @	.30	" "	3.80	
Earth Work			120.00	
			<hr/>	
			\$591.20	\$118.20

Sidegate.

Sta. 2251-31. Width 10 ft. Depth 6 ft. Length 24 ft. 30%

Lumber 2,516 ft. . . @	\$25.00	per M	\$64.10	
Carpenter Work . . . @	7.00	" "	18.20	
Hauling @	3.00	" "	7.80	
Iron @	2.00	" "	5.20	
Nails @	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$121.10	\$36.30

2106

Sidegate.

Sta. 2294-21. Width 8 ft. Depth 70". Length 20 ft. 30%

Lumber 3,180 ft. . . @	\$25.00	per M	\$79.50	
Carpenter Work . . . @	7.00	" "	22.40	
Hauling @	3.00	" "	9.60	
Iron @	2.00	" "	6.60	
Nails @	.30	" "	1.00	
Earth Work			25.00	
			<hr/>	
			\$144.10	\$23.20

Sidegate.

Sta. 2319-74. Width 10 ft. Depth 78". Length 26 ft. 20%

Lumber 2,702 ft. . . @	\$25.00	per M	\$67.50	
Carpenter Work . . . @	7.00	" "	18.90	
Hauling @	3.00	" "	8.10	
Iron @	2.00	" "	5.40	
Nails @	.30	" "	.80	
Earth Work			25.00	
			<hr/>	
			\$125.70	\$25.10

Bridge.

Sta. 2333-07.	Width 18 ft.	Length 160 ft.	40%
Lumber 6,418 ft.@	\$25.00 per M	\$160.40	
Carpenter Work@	7.00 " "	51.30	
Hauling@	3.00 " "	19.20	
Iron@	2.00 " "	12.80	
Nails@	.30 " "	1.90	
Earth Work		25.00	
		<u>\$270.60</u>	\$108.20

2107

Sidegate.

Sta. 2363-67.	Width 10 ft.	Depth 78".	Length 26 ft.	20%
Lumber 3,087 ft.@	\$25.00 per M		\$77.20	
Carpenter Work@	7.00 " "		21.70	
Hauling@	3.00 " "		9.90	
Iron@	2.00 " "		6.60	
Nails@	.30 " "		1.00	
Earth Work			25.00	
			<u>\$141.40</u>	\$28.30

Sidegate.

Sta. 2361-71.	Width 8 ft.	Depth 4 ft.	Length 24 ft.	10%
Lumber 1,667 ft.@	\$25.00 per M		\$41.70	
Carpenter Work@	7.00 " "		11.90	
Hauling@	3.00 " "		5.10	
Iron@	2.00 " "		3.40	
Nails@	.30 " "		.50	
Earth Work			25.00	
			<u>\$87.60</u>	\$8.80

Bridge.

Sta. 2364-82.	Width 16 ft.	Length 66 ft.	60%
Lumber 7,063@	\$25.00 per M	\$176.60	
Carpenter Work@	.00 " "	49.70	
Hauling@	3.00 " "	21.30	
Iron@	2.00 " "	14.20	
Nails@	.30 " "	2.10	
Earth Work		25.00	
		<u>\$388.90</u>	\$173.30

2108

Sidegate.

Sta. 2367-44. Width 3 ft. Depth 74". Length 24 ft. 20%

Lumber 1,632 ft...@	\$25.00	per M	\$40.80
Carpenter Work ...@	7.00	" "	11.40
Hauling@	3.00	" "	4.90
Iron@	2.00	" "	3.40
Nails@	.30	" "	.50
Earth Work			25.00

\$86.10

\$17.40

Sidegate.

Sta. 2367-44. Width 10 ft. Depth 8 ft. Length 27 ft. 30%
Lumber 2367-44. Width 10 ft. Depth 8 ft. Length 27 ft. 30%

Carpenter Work ...@	\$25.00	per M	\$85.90
Carpenter Work ...@	7.00	" "	24.00
Hauling@	3.00	" "	10.30
Iron@	2.00	" "	6.90
Nails@	.30	" "	1.00
Earth Work			25.00

\$153.10

\$45.90

Weir.

Sta. 2368-15. Same as Station 2252-17. 10%
\$591.20 \$59.10

Sidegate.

Sta. 2368-38. Width 10 ft. Depth 76". Length 27 ft. 30%

Lumber 2,934 ft...@	\$25.00	per M	\$73.40
Carpenter Work ...@	7.00	" "	20.50
Hauling@	3.00	" "	8.80
Iron@	2.00	" "	5.90
Nails@	.30	" "	.90
Earth Work			25.00

\$134.50

\$40.35

2109

Bridge.

Sta. 2389-68. Width 16 ft. Length 50 ft. 20%

Lumber 5,223 ft...@	\$25.00	per M	\$143.10
Carpenter Work ...@	7.00	" "	39.90
Hauling@	3.00	" "	17.10
Iron@	2.00	" "	11.40
Nails@	.30	" "	1.70
Earth Work			25.00

\$238.20

\$47.70

Sidegate.

Sta. 2415-39. Width 38". Depth 54". Length 24 ft. 10%

Lumber 1,076 ft...@	\$25.00 per M	\$26.90	
Carpenter Work ...@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$65.60	\$6.60

Bridge.

Sta. 2415-53. Width 12 ft. Length 42 ft. 50%

Lumber 3,759 ft...@	\$25.00 per M	\$94.00	
Carpenter Work ...@	7.00 " "	26.60	
Hauling@	3.00 " "	11.30	
Iron@	2.00 " "	7.50	
Nails@	.30 " "	1.10	
Earth Work		25.00	
		<hr/>	
		\$165.50	\$82.80

2110

Sidegate.

Sta. 2442-71. Width 10 ft. Depth 78". Length 29 ft. 20%

Lumber 3,272 ft...@	\$25.00 per M	\$81.80	
Carpenter Work ...@	7.00 " "	23.10	
Hauling@	3.00 " "	9.90	
Iron@	2.00 " "	6.60	
Nails@	.30 " "	1.00	
Earth Work		25.00	
		<hr/>	
		\$147.40	\$29.60

Bridge.

Sta. 2442-72. Width 20 ft. Length 64 ft. 30%

Lumber 8,668 ft...@	\$25.00 per M	\$266.70	
Carpenter Work ...@	7.00 " "	60.90	
Hauling@	3.00 " "	26.10	
Iron@	2.00 " "	17.40	
Nails@	.30 " "	2.60	
Earth Work		25.00	
		<hr/>	
		\$398.70	\$119.60

Sidegate.

Sta. 2450-29. Width 60". Depth 40". Length 20 ft. 20%

Lumber 1,205 ft. . . @	\$25.00 per M	\$30.10	
Carpenter Work . . . @	7.00 " "	8.40	
Hauling @	3.00 " "	3.60	
Iron @	2.00 " "	2.40	
Nails @	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$70.00	\$14.00

2111

Bridge.

Sta. 2459-51. Width 16 ft. Length 50 ft. 30%

Lumber 5,723 ft. . . @	\$25.00 per M	\$143.10	
Carpenter Work . . . @	7.00 " "	39.90	
Hauling @	3.00 " "	17.10	
Iron @	2.00 " "	11.40	
Nails @	.30 " "	.70	
Earth Work		25.00	
		<hr/>	
		\$238.20	\$71.50

Sidegate.

Sta. 2472-51. Width 10 ft. Depth 78". Length 28 ft. 30%

Lumber 3,230 ft. . . @	\$25.00 per M	\$80.70	
Carpenter Work . . . @	7.00 " "	22.60	
Hauling @	3.00 " "	9.60	
Iron @	2.00 " "	6.40	
Nails @	.30 " "	1.00	
Earth Work		25.00	
		<hr/>	
		\$145.30	\$43.60

Sidegate.

Sta. 2485-18. Width 68". Depth 5 ft. Length 26 ft. 20%

Lumber 1,925 ft. . . @	\$25.00 per M	\$48.10	
Carpenter Work . . . @	7.00 " "	13.30	
Hauling @	3.00 " "	5.70	
Iron @	2.00 " "	3.80	
Nails @	.30 " "	.60	
Earth Work		25.00	
		<hr/>	
		\$96.50	\$19.30

2112 Sidegate.

Sta. 2503-61. Width 10 ft. Depth 17 ft. Length 29 ft. 30%

Lumber 3,484 ft. . . @	\$25.00	per M	\$87.10	
Carpenter Work . . . @	7.00	" "	24.50	
Hauling @	3.00	" "	10.50	
Iron @	2.00	" "	7.00	
Nails @	.30	" "	1.10	
Earth Work			25.00	
			<hr/>	
			\$155.20	\$46.60

Bridge.

Sta. 2504-29. Width 24 ft. Length 62 ft. 30%

Lumber 9,619 ft. . . @	\$25.00	per M	\$240.50	
Carpenter Work . . . @	7.00	" "	67.40	
Hauling @	3.00	" "	28.80	
Iron @	2.00	" "	19.20	
Nails @	.30	" "	2.90	
Earth Work			25.00	
			<hr/>	
			\$383.80	\$115.10

Spillway.

Sta. 2505-21. Width 20 ft. Depth 8 ft. Length 20 ft. 30%

Lumber 7,000 ft. . . @	\$25.00	per M	\$175.00	
Carpenter Work . . . @	7.00	" "	49.00	
Hauling @	3.00	" "	21.00	
Iron @	2.00	" "	14.00	
Nails @	.30	" "	2.10	
Earth Work			120.00	
			<hr/>	
			\$381.10	\$114.30

2113 Sidegate.

Sta. 2517-40. Width 10 ft. Depth 74". Length 30 ft. 20%

Lumber 3,179 ft. . . @	\$25.00	per M	\$79.50	
Carpenter Work . . . @	7.00	" "	22.40	
Hauling @	3.00	" "	9.60	
Iron @	2.00	" "	6.40	
Nails @	.30	" "	1.00	
Earth Work			25.00	
			<hr/>	
			\$143.90	\$48.80

Weir.

Sta. 2519-80. Width 16 ft. Depth 80". Length 40 ft. 20%

Same as Station 2252-17. \$591.20 \$119.20

Sidegate.

Sta. 2538-68. Width 38". Depth 64". Length 26 ft. 30%

Lumber 1,770 ft. . . @	\$25.00	per M	\$44.30
Carpenter Work . . . @	7.00	" "	12.60
Hauling @	3.00	" "	5.40
Iron @	2.00	" "	3.60
Nails @	.30	" "	.50
Earth Work			25.00

\$91.40 \$27.40

Sidegate.

Sta. 2541-23. Width 72". Depth 5 ft. Length 20 ft 30%

Lumber 1,653 ft. . . @	\$25.00	per M	\$41.30
Carpenter Work . . . @	7.00	" "	11.50
Hauling @	3.00	" "	4.80
Iron @	2.00	" "	3.20
Nails @	.30	" "	.50
Earth Work			25.00

\$86.30 \$25.90

2114 Sidegate.

Sta. 2555-45. Width 6 ft. Depth 66". Length 26 ft. 20%

Lumber 2,278 ft. . . @	\$25.00	per M	\$56.90
Carpenter Work . . . @	7.00	" "	16.10
Hauling @	3.00	" "	6.90
Iron @	2.00	" "	4.60
Nails @	.30	" "	.70
Earth Work			25.00

\$110.20 \$22.00

Weir.

Sta. 2562-62. Width 16 ft. Depth 7 ft. Length 30 ft. 20%

Lumber 9,486 ft. . . @	\$25.00	per M	\$237.10
Carpenter Work . . . @	7.00	" "	66.50
Hauling @	3.00	" "	28.50
Iron @	2.00	" "	19.00
Nails @	.30	" "	2.80
Earth Work			120.00

\$473.90 \$94.80

Gate.

Sta. 2567-55. Width 16 ft. Depth 7 ft. Length 12 ft. 40%

Lumber 4200 ft.@	\$25.00	per M	\$105.00	
Carpenter Work@	7.00	" "	29.40	
Hauling@	3.00	" "	12.60	
Iron@	2.00	" "	8.40	
Nails@	.30	" "	1.30	
Earth Work			25.00	
			<u>\$181.70</u>	\$72.70

2115

Merced County.

Station 2567-55.

Total Cost of Structures	\$29,651.70
Total Depreciation	8,836.65
Present Value	<u>\$20,815.05</u>

2116 *Estimate of Value of the San Joaquin & Kings River Canal & Irrigation Company's Canal, Stanislaus County, California.*

Total Present Value of Structures	\$6,572.30
Total Present Value of Earth Work	9,676.00
Engineering & Supervision, 10%	2,285.00
Contingencies, 10%	2,285.00
Total Value	<u>\$20,818.30</u>

2117

Earth Work in Stanislaus County, Main Canal.

Sta. 3225-00-3468-00	91,151 yds.
Sta. 3468-00-3530-00	33,256 yds.
Sta. 3530-00-3535-00	505 yds.
Sta. 3535-00-3547-15	6,524 yds.
Sta. 3547-00-3746-31	62,084 yds.

Total Earth Work 193,520 yds.

Cost 193,520 yds. @ \$.05 \$9,676.00

Telephone Lines, Stanislaus County.

7 Miles @ \$115.00 per Mile	\$805.00	30%
1/2 Charged to Miller & Lax	268.00	
3/4 Charged to the Canal Company	<u>\$537.00</u>	\$162.00

Canal Camp, Main Canal.

Sta. 3590	House.....	\$400.00	
	Barn.....	175.00	
	Chicken House.....	40.00	
	Bunk House.....	25.00	
	Fence.....	25.00	
	Well.....	60.00	
		<hr/>	
		\$725.00	\$227.50

2118 Stanislaus County, Main Canal.

Sidegate.

Sta. 3228-37.	Width 66".	Depth 80".	Length 28 ft.	30%
Lumber 2,355 ft. . . @	\$25.00	per M	\$58.90	
Carpenter Work . . . @	7.00	" "	16.10	
Hauling @	3.00	" "	6.90	
Iron @	2.00	" "	4.60	
Nails @	.30	" "	.70	
Earth Work			25.00	
			<hr/>	
			\$112.20	\$33.70

Bridge.

Sta. 324-24.	Width 16 ft.	Length 67 ft.	90%
Lumber 7,147 ft. . . @	\$25.00	per M	\$178.70
Carpenter Work . . . @	7.00	" "	49.70
Hauling @	3.00	" "	21.30
Iron @	2.00	" "	14.20
Nails @	.30	" "	2.10
Earth Work			25.00
			<hr/>
			\$291.00
			\$261.90

Sidegate.

Sta. 324-78.	Width 42".	Depth 58".	Length 28 ft.	40%
Lumber 1,406 ft. . . @	\$25.00	per M	\$35.10	
Carpenter Work . . . @	7.00	" "	9.30	
Hauling @	3.00	" "	4.20	
Iron @	2.00	" "	2.80	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$77.40	\$31.00

1516 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

2119 Bridge.

Sta. 3245-04.	Width 18 ft.	Length 78 ft.	30%
Lumber 10,317 ft...@	\$25.00 per M	\$257.90	
Carpenter Work ...@	7.00 " "	72.10	
Hauling@	3.00 " "	90.90	
Iron@	2.00 " "	20.60	
Nails@	.30 " "	3.10	
Earth Work		25.00	
		<u>\$409.60</u>	\$122.90

Sidegate.

Sta. 3268-04.	Width 66".	Depth 74".	Length 26 ft.	30%
Lumber 2,242 ft. ...@	\$25.00 per M	\$56.50		
Carpenter Work ...@	7.00 " "	15.40		
Hauling@	3.00 " "	6.60		
Iron@	2.00 " "	4.40		
Nails@	.30 " "	.70		
Earth Work		25.00		
		<u>\$108.60</u>		\$32.50

Sidegate.

Sta. 3274-70.	Width 66".	Depth 7".	Length 27 ft.	30%
Lumber 2,225 ft. ...@	\$25.00 per M	\$55.60		
Carpenter Work ...@	7.00 " "	15.40		
Hauling@	3.00 " "	6.60		
Iron@	2.00 " "	4.40		
Nails@	.30 " "	.70		
Earth Work		25.00		
		<u>\$107.70</u>		\$21.50

2120 Bridge.

Sta. 3284-02.	Width 16 ft.	Length 62 ft.	80%
Lumber 8,264 ft. ...@	\$25.00 per M	\$206.60	
Carpenter Work ...@	7.00 " "	57.40	
Hauling@	3.00 " "	24.60	
Iron@	2.00 " "	16.40	
Nails@	.30 " "	2.50	
Earth Work		25.00	
		<u>\$332.50</u>	\$266.00

Sidegate.

Sta. 3293-36. Width 46". Depth 6 ft. Length 26 ft. 30%

Lumber 1,354 ft. . . @	\$25.00	per M	\$33.90	
Carpenter Work . . . @	7.00	" "	9.10	
Hauling @	3.00	" "	3.90	
Iron @	2.00	" "	2.60	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$75.00	\$22.50

Weir & Bridge.

Sta. 3293-93. Width 28 ft. Depth 88". Length 38 ft. 60%

Lumber 13,400 ft. . . @	\$25.00	per M	\$335.00	
Carpenter Work . . . @	7.00	" "	93.80	
Hauling @	3.00	" "	40.20	
Iron @	2.00	" "	26.80	
Nails @	.30	" "	4.00	
Earth Work			25.00	
			<hr/>	
			\$619.80	\$431.90

2121

Sidegate.

Sta. 3308-10. Width 42". Depth 5 ft. Length 27 ft. 30%

Lumber 1,488 ft. . . @	\$25.00	per M	\$37.20	
Carpenter Work . . . @	7.00	" "	10.50	
Hauling @	3.00	" "	4.50	
Iron @	2.00	" "	3.00	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$80.70	\$24.20

Sidegate.

Sta. 3322-23. Width 62". Depth 80". Length 26 ft. 30%

Lumber 2,042 ft. . . @	\$25.00	per M	\$51.00	
Carpenter Work . . . @	7.00	" "	14.70	
Hauling @	3.00	" "	6.30	
Iron @	2.00	" "	4.20	
Nails @	.30	" "	.60	
Earth Work			25.00	
			<hr/>	
			\$101.80	\$30.50

Sidegate.

Sta. 3347-64. Width 60". Depth 78". Length 20 ft. 20%

Lumber 1,957 ft. . . @	\$25.00	per M	\$48.90	
Carpenter Work . . . @	7.00	" "	14.00	
Hauling @	3.00	" "	6.00	
Iron @	2.00	" "	4.00	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$98.40	\$19.70

2122

Sidegate.

Sta. 3353-55. Width 3 ft. Depth 54". Length 20 ft. 30%

Lumber 1,031 ft. . . @	\$25.00	per M	\$25.70	
Carpenter Work . . . @	7.00	" "	7.00	
Hauling @	3.00	" "	3.00	
Iron @	2.00	" "	2.00	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$63.20	\$19.00

Sidegate.

Sta. 3357-91. Width 66". Depth 80". Length 20 ft. 30%

Lumber 1,968 ft. . . @	\$25.00	per M	\$49.20	
Carpenter Work . . . @	7.00	" "	14.00	
Hauling @	3.00	" "	6.00	
Iron @	2.00	" "	4.00	
Nails @	.30	" "	.60	
Earth Work			25.00	
			<hr/>	
			\$98.80	\$29.60

Measuring Gate.

Sta. 3369-48. Width 13 ft. Depth 66". Length 9 ft. 20%

Lumber 1,818 ft. . . @	\$25.00	per M	\$45.40	
Carpenter Work . . . @	7.00	" "	12.60	
Hauling @	3.00	" "	5.40	
Iron @	2.00	" "	3.60	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$92.50	\$18.50

2123

Sidegate.

Sta. 3369-53. Width 8 ft. Depth 12 ft. Length 18 ft. 20%

Lumber 3,947 ft. . . @	\$25.00	per M	\$98.70	
Carpenter Work . . . @	7.00	" "	22.30	
Hauling @	3.00	" "	11.70	
Iron @	2.00	" "	7.80	
Nails @	.30	" "	1.20	
Earth Work			25.00	
			<hr/>	
			\$171.70	\$34.30

Bridge.

Sta. 3369-70. Width 20 ft. Length 60 ft. 50%

Lumber 8,249 ft. . . @	\$25.00	per M	\$206.20	
Carpenter Work . . . @	7.00	" "	57.40	
Hauling @	3.00	" "	24.60	
Iron @	2.00	" "	16.40	
Nails @	.30	" "	2.50	
Earth Work			25.00	
			<hr/>	
			\$332.10	\$166.10

Sidegate.

Sta. 3376-80. Width 4 ft. Depth 5 ft. Length 19 ft. 40%

Lumber 1,352 ft. . . @	\$25.00	per M	\$33.80	
Carpenter Work . . . @	7.00	" "	9.10	
Hauling @	3.00	" "	3.90	
Iron @	2.00	" "	2.60	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$74.90	\$30.00

2124

Sidegate.

Sta. 3384-04. Width 4 ft. Depth 44". Length 20 ft. 40%.

Lumber 1,126 ft. . . @	\$25.00	per M	\$48.10	
Carpenter Work . . . @	7.00	" "	7.70	
Hauling @	3.00	" "	3.30	
Iron @	2.00	" "	2.20	
Nails @	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$66.80	\$26.70

Sidegate.

Sta. 3400-73. Width 66". Depth 6 ft. Length 19 ft. 40%.

Lumber 1,991 ft. . . @	\$25.00	per M	\$49.80
Carpenter Work . . . @	7.00	" "	14.00
Hauling @	3.00	" "	6.00
Iron @	2.00	" "	4.00
Nails @	.30	" "	.60
Earth Work			25.00

\$99.40

\$39.80

Weir.

Sta. 3401-17. Width 22 ft. Depth 9 ft. 2". Length 34 ft. 90%.

Lumber 14,000 ft. . . @	\$25.00	per M	\$350.00
Carpenter Work . . . @	7.00	" "	98.00
Hauling @	3.00	" "	42.00
Iron @	2.00	" "	28.00
Nails @	.30	" "	4.20
Earth Work			120.00

\$652.20

\$578.00

2125

Measuring Gate.

Sta. 3426-06. Width 12½ ft. Depth 56". Length 8 ft. 30%.

Lumber 1,424 ft. . . @	\$25.00	per M	\$35.60
Carpenter Work . . . @	7.00	" "	9.80
Hauling @	3.00	" "	4.20
Iron @	2.00	" "	2.80
Nails @	.30	" "	.50
Earth Work			25.00

\$77.90

\$23.40

Sidegate.

Sta. 3424-07. Width 4 ft. Depth 6 ft. Length 20 ft. 60%.

Lumber 1,786 ft. . . @	\$25.00	per M	\$44.60
Carpenter Work . . . @	7.00	" "	12.60
Hauling @	3.00	" "	5.40
Iron @	2.00	" "	3.60
Nails @	.30	" "	.50
Earth Work			25.00

\$91.70

\$55.00

Sidegate.

Sta. 3430-39. Width 52". Depth 34". Length 20 ft. 40%

Lumber 975 ft....@	\$25.00	per M	\$24.40
Carpenter Work ...@	7.00	" "	7.00
Hauling@	3.00	" "	3.00
Iron@	2.00	" "	2.00
Nails@	.30	" "	.50
Earth Work.....			25.00

\$61.90

\$24.80

2126

Sidegate.

Sta. 3443-83. Width 66". Depth 6 ft. Length 28 ft. 40%

Lumber 2,383 ft...@	\$25.00	per M	\$59.60
Carpenter Work ...@	7.00	" "	16.80
Hauling@	3.00	" "	7.20
Iron@	2.00	" "	4.80
Nails@	.30	" "	.70
Earth Work.....			25.00

\$114.10

\$45.60

Measuring Gate.

Sta. 3444-22. Width 12½ ft. Depth 66". Length 8 ft. 30%

Lumber 1,671 ft...@	\$25.00	per M	\$41.40
Carpenter Work ...@	7.00	" "	11.90
Hauling@	3.00	" "	5.10
Iron@	2.00	" "	3.40
Nails@	.30	" "	.50
Earth Work.....			25.00

\$87.70

\$26.30

Sidegate.

Sta. 3457-01. Width 4 ft. Depth 58". Length 16 ft. 20%

Lumber 1,230 ft...@	\$25.00	per M	\$30.70
Carpenter Work ...@	7.00	" "	8.40
Hauling@	3.00	" "	3.60
Iron@	2.00	" "	2.40
Nails@	.30	" "	.50
Earth Work.....			25.00

\$70.60

\$14.10

2127

Measuring Gate.

Sta. 3465-13. Width 13 ft. Depth 5 ft. Length 8 ft. 20%

Lumber 1,605 ft. . . @	\$25.00	per M	\$40.10
Carpenter Work . . . @	7.00	" "	11.20
Hauling @	3.00	" "	4.80
Iron @	2.00	" "	3.20
Nails @	.30	" "	.50
Earth Work.			25.00

\$84.80

\$17.00

Sidegate.

Sta. 3465-13. Width 44". Depth 6 ft. Length 29 ft. 40%

Lumber 1,919 ft. . . @	\$25.00	per M	\$48.00
Carpenter Work . . . @	7.00	" "	13.30
Hauling @	3.00	" "	5.70
Iron @	2.00	" "	3.80
Nails @	.30	" "	.60
Earth Work.			25.00

\$94.40

\$38.60

Sidegate.

Sta. 3470-63. Width 3 ft. 8". Depth 34". Length 20 ft. 40%

Lumber 825 ft. . . . @	\$25.00	per M	\$20.60
Carpenter Work . . . @	7.00	" "	5.60
Hauling @	3.00	" "	2.40
Iron @	2.00	" "	1.60
Nails @	.30	" "	.50
Earth Work.			25.00

\$55.70

\$23.30

2128

Sidegate.

Sta. 3480-63. Width 3 ft. Depth 56". Length 26 ft. 40%

Lumber 1,302 ft. . . @	\$25.60	per M	\$32.50
Carpenter Work . . . @	7.00	" "	9.10
Hauling @	3.00	" "	3.90
Iron @	2.00	" "	2.60
Nails @	.30	" "	.50
Earth Work			25.00

\$73.60

\$29.40

Bridge.

Sta. 3480-87.	Width 16 ft.	Length 20 ft.	70%
Lumber 6,561 ft...@	\$25.00 per M	\$164.00	
Carpenter Work ...@	7.00 " "	42.20	
Hauling@	3.00 " "	19.80	
Iron@	2.00 " "	13.20	
Nails@	.30 " "	2.00	
Earth Work.....		25.00	
		<hr/>	
		\$270.20	\$189.10

Sidegate.

Sta. 3491-86.	Width 3 ft.	Depth 66".	Length 20 ft.	40%
Lumber 974 ft....@	\$25.00 per M	\$24.30		
Carpenter Work ...@	7.00 " "	7.00		
Hauling@	3.00 " "	3.00		
Iron@	2.00 " "	2.00		
Nails@	.30 " "	.50		
Earth Work.....		25.00		
		<hr/>		
		\$61.80		\$24.70

2129

Sidegate.

Sta. 3490-26.	Width 4 ft.	Depth 54".	Length 24 ft.	30%
Lumber 1,266 ft...@	\$25.00 per M	\$31.60		
Carpenter Work ...@	7.00 " "	9.10		
Hauling@	3.00 " "	3.90		
Iron@	2.00 " "	2.60		
Nails@	.30 " "	.50		
Earth Work.....		25.00		
		<hr/>		
		\$72.70		\$21.80

Sidegate.

Sta. 3500-95.	Width 3 ft.	Depth 34".	Length 20 ft.	40%
Lumber 1,374 ft...@	\$25.00 per M	\$34.40		
Carpenter Work ...@	7.00 " "	9.80		
Hauling@	3.00 " "	4.20		
Iron@	2.00 " "	2.80		
Nails@	.30 " "	.50		
Earth Work.....		25.00		
		<hr/>		
		\$76.70		\$30.70

Sidegate.

Sta. 3501-38. Width 4 ft. Depth 6 ft. Length 24 ft. 40%

Lumber 1,759 ft...@	\$25.00	per M	\$44.00
Carpenter Work ...@	7.00	" "	11.90
Hauling@	3.00	" "	5.10
Iron@	2.00	" "	3.40
Nails@	.30	" "	.50
Earth Work.....			25.00

\$89.90

\$36.00

2130

Sidegate.

Sta. 3509-31. Width 2 ft. Depth 54". Length 20 ft. 40%

Lumber 927 ft....@	\$25.00	per M	\$23.10
Carpenter Work ...@	7.00	" "	6.30
Hauling@	3.00	" "	2.70
Iron@	2.00	" "	1.80
Nails@	.30	" "	.50
Earth Work.....			25.00

\$59.40

\$23.80

Sidegate.

Sta. 3511-71. Width 3 ft. Depth 52". Length 26 ft. 40%

Lumber 1,285 ft...@	\$25.00	per M	\$32.10
Carpenter Work ...@	7.00	" "	9.10
Hauling@	3.00	" "	3.90
Iron@	2.00	" "	2.60
Nails@	.30	" "	.50
Earth Work.....			25.00

\$73.20

\$39.30

Sidegate.

Sta. 3514-03.

Obsolete.

100%

Sidegate.

Sta. 3531-69. Width 84". Depth 66". Length 20 ft. 40%

Lumber 2,027 ft...@	\$25.00	per M	\$50.70
Carpenter Work ...@	7.00	" "	14.00
Hauling@	3.00	" "	6.00
Iron@	2.00	" "	4.00
Nails@	.30	" "	.60
Earth Work.....			25.00

\$100.30

\$40.00

2131

Sidegate.

Sta. 3531-19. Width 22 ft. Depth 12 ft. Length 16 ft. 90%

Lumber 7,500 ft...@	\$25.00	per M	\$187.50
Carpenter Work ...@	7.00	" "	52.50
Hauling@	3.00	" "	22.50
Iron@	2.00	" "	15.00
Nails@	.30	" "	2.20
Earth Work.....			25.00

\$304.70

\$224.30

Weir.

Sta. 3547-95. Width 24 ft. Depth 12 ft. Length 32 ft. 80%

Lumber 15,000 ft...@	\$25.00	per M	\$375.00
Carpenter Work ...@	7.00	" "	105.00
Hauling@	3.00	" "	45.00
Iron@	2.00	" "	30.00
Nails@	.30	" "	4.50
Earth Work.....			120.00

\$679.50

\$543.60

Weir.

Sta. 3548-53. Width 24 ft. Depth 12 ft. Length 50 ft. 30%

Lumber 17,500 ft...@	\$25.00	per M	\$437.50
Carpenter Work ...@	7.00	" "	122.50
Hauling@	3.00	" "	52.50
Iron@	2.00	" "	35.00
Nails@	.30	" "	5.20
Earth Work.....			120.00

\$772.70

\$231.80

2132

Weir.

Sta. 3549-60 Width 24 ft. Depth 12 ft. Length 34 ft. 80%

Lumber 1,500 ft...@	\$25.00	per M	\$375.00
Carpenter Work ...@	7.00	" "	105.00
Hauling@	3.00	" "	45.00
Iron@	2.00	" "	30.00
Nails@	.30	" "	4.50
Earth Work.....			120.00

\$679.50

\$542.00

Sidegate.

Sta. 3570-31. Width 96". Depth 5 ft. Length 25 ft. 20%

Lumber 1,914 ft.	@	\$25.00	per M	\$47.80	
Carpenter Work	@	7.00	" "	13.30	
Hauling	@	3.00	" "	5.70	
Iron	@	2.00	" "	3.80	
Nails	@	.30	" "	.60	
Earth Work				25.00	
				<hr/>	
				\$96.20	\$19.20

Weir.

Sta. 3570-93. Width 16 ft. Depth 78". Length 40 ft. 20%

Lumber 12,724 ft.	@	\$25.00	per M	\$318.10	
Carpenter Work	@	7.00	" "	88.90	
Hauling	@	3.00	" "	38.10	
Iron	@	2.00	" "	25.40	
Nails	@	.30	" "	3.80	
Earth Work				120.00	
				<hr/>	
				\$594.30	\$118.90

2133

Bridge.

Sta. 3581-35. Width 16 ft. Length 60 ft. 40%

Lumber 6,561 ft.	@	\$25.00	per M	\$164.00	
Carpenter Work	@	7.00	" "	46.20	
Hauling	@	3.00	" "	19.80	
Iron	@	2.00	" "	13.20	
Nails	@	.30	" "	2.00	
Earth Work				25.00	
				<hr/>	
				\$217.20	\$108.10

Sidegate.

Sta. 3583-30. Width 4 ft. Depth 6 ft. Length 20 ft. 40%

Lumber 1,373 ft.	@	\$25.00	per M	\$34.30	
Carpenter Work	@	7.00	" "	9.80	
Hauling	@	3.00	" "	4.20	
Iron	@	2.00	" "	2.80	
Nails	@	.30	" "	.50	
Earth Work				25.00	
				<hr/>	
				\$76.50	\$30.80

Sidegate.

Sta. 3590-97. Width 3 ft. Depth 56". Length 20 ft. 60%

Lumber 820 ft....@	\$25.00	per M	\$20.50
Carpenter Work....@	7.00	" "	5.60
Hauling@	3.00	" "	2.40
Iron@	2.00	" "	1.60
Earth Work			25.00

\$55.60

\$33.40

2134

Sidegate.

Sta. 3593-98. Width 6 ft. Depth 4 ft. Length 15 ft. 80%

Lumber 1,089@	\$25.00	per M	\$27.20
Carpenter Work....@	7.00	" "	7.70
Hauling@	3.00	" "	3.30
Iron@	2.00	" "	2.20
Nails@	.30	" "	.50
Earth Work			25.00

\$65.90

\$52.70

Sidegate.

Sta. 3594-22. Width 6 ft. Depth 5 ft. Length 20 ft. 30%

Lumber 1,532 ft....@	\$25.00	per M	\$39.50
Carpenter Work....@	7.00	" "	11.20
Hauling@	3.00	" "	4.80
Iron@	2.00	" "	3.20
Nails@	.30	" "	.50
Earth Work			25.00

\$84.20

\$25.20

Sidegate.

Sta. 3596-59. Width 66". Depth 66". Length 27 ft. 40%

Lumber 2,013 ft....@	\$25.00	per M	\$50.30
Carpenter Work....@	7.00	" "	14.00
Hauling@	3.00	" "	6.00
Iron@	2.00	" "	4.00
Nails@	.30	" "	.60
Earth Work			25.00

\$99.90

\$40.00

2135

Sidegate.

Sta. 3604-33. Width 3 ft. Depth 66". Length 20 ft. 40%

Lumber 1,124 ft....@	\$25.00 per M	\$28.10	
Carpenter Work....@	7.00 " "	7.70	
Hauling@	3.00 " "	3.30	
Iron@	2.00 " "	2.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$66.80	\$26.70

Sidegate.

Sta. 3615-71. Width 4 ft. Depth 76". Length 24 ft. 40%

Lumber 1,724 ft....@	\$25.00 per M	\$43.10	
Carpenter Work ..@	7.00 " "	11.90	
Hauling@	3.00 " "	5.10	
Iron@	2.00 " "	3.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$89.00	\$36.50

Measuring Gate.

Sta. 3615-96. Width 12½ ft. Depth 5 ft. Length 9 ft. 20%

Lumber 1,762 ft....@	\$25.00 per M	\$44.10	
Carpenter Work....@	7.00 " "	12.60	
Hauling@	3.00 " "	5.40	
Iron@	2.00 " "	3.60	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$91.20	\$27.40

2136

Bridge.

Sta. 3624-02. Width 18 ft. Length 56 ft. 60%

Lumber 7,044 ft....@	\$25.00 per M	\$176.10	
Carpenter Work ..@	7.00 " "	49.00	
Hauling@	3.00 " "	21.00	
Iron@	2.00 " "	14.00	
Nails@	.30 " "	2.10	
Earth Work		25.00	
		<hr/>	
		\$287.20	\$172.30

Sidegate.

Sta. 3636-36. Width 4 ft. Depth 74". Length 25 ft. 40%

Lumber 1,622 ft....@	\$25.00	per M	\$40.50	
Carpenter Work....@	7.00	" "	11.20	
Hauling@	3.00	" "	4.80	
Iron@	2.00	" "	3.20	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$85.20	\$34.10

Sidegate.

Sta. 3640-68. Width 34". Depth 58". Length 27 ft. 70%

Lumber 1,337 ft....@	\$25.00	per M	\$33.40	
Carpenter Work....@	7.00	" "	9.10	
Hauling@	3.00	" "	3.90	
Iron@	2.00	" "	2.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$74.50	\$52.10

2137 Bridge.

Sta. 3644-53. Width 20 ft. Length 60 ft. 50%

Lumber 8,249 ft....@	\$25.00	per M	\$206.20	
Carpenter Work....@	7.00	" "	58.10	
Hauling@	3.00	" "	24.90	
Iron@	2.00	" "	16.60	
Nails@	.30	" "	2.50	
Earth Work			25.00	
			<hr/>	
			\$333.30	\$166.60

Measuring Gate.

Sta. 3652-83. Width 12½ ft. Depth 5 ft. Length 8 ft. 20%

Lumber 1,521 ft....@	\$25.00	per M	\$38.00	
Carpenter Work....@	7.00	" "	10.50	
Hauling@	3.00	" "	4.50	
Iron@	2.00	" "	3.00	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$81.50	\$16.30

Sidegate.

Sta. 3652-91. Width 4 ft. Depth 78". Length 24 ft. 40%

Lumber 1,411 ft....@	\$25.00 per M	\$35.30	
Carpenter Work ...@	7.00 " "	9.80	
Hauling@	3.00 " "	4.20	
Iron@	2.00 " "	2.80	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$77.60	\$31.00

2138

Sidegate.

Sta. 3,654-42. Width 2 ft. Depth 3 ft. Length 21 ft. 50%

Lumber 643 ft....@	\$25.00 per M	\$16.10	
Carpenter Work ...@	7.00 " "	4.90	
Hauling@	3.00 " "	2.10	
Iron@	2.00 " "	1.40	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$50.00	\$25.00

Sidegate.

Sta. 3668-71. Width 60". Depth 62". Length 31 ft. 70%

Lumber 1,613 ft....@	\$25.00 per M	\$40.30	
Carpenter Work ...@	7.00 " "	11.20	
Hauling@	3.00 " "	4.80	
Iron@	2.00 " "	3.20	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$85.00	\$59.50

Sidegate.

Sta. 3680-79. Width 4 ft. Depth 80". Length 28 ft. 40%

Lumber 1,479 ft....@	\$25.00 per M	\$37.00	
Carpenter Work ...@	7.00 " "	10.50	
Hauling@	3.00 " "	4.50	
Iron@	2.00 " "	3.00	
Nails@	.30 " "	.50	
Earth Work		25.00	
		<hr/>	
		\$80.50	\$32.20

2139

Sidegate.

Sta. 3687-21. Width 28". Depth 66". Length 26 ft. 40%

Lumber 1,567 ft....@	\$25.00	per M	\$39.20
Carpenter Work....@	7.00	" "	11.20
Hauling@	3.00	" "	4.80
Iron@	2.00	" "	3.20
Nails@	.30	" "	.50
Earth Work			25.00

\$83.90

\$33.60

Weir.

Sta. 3687-61. Width 25 ft. Depth 8 ft. Length 34 ft. 80%

Lumber 12,914 ft....@	\$25.00	per M	\$322.80
Carpenter Work....@	7.00	" "	90.30
Hauling@	3.00	" "	38.70
Iron@	2.00	" "	25.80
Nails@	.30	" "	3.90
Earth Work			120.00

\$601.50

\$418.20

Sidegate.

Sta. 3701-29. Width 5 ft. Depth 6 ft. Length 25 ft. 40%

Lumber 1,569 ft....@	\$25.00	per M	\$39.20
Carpenter Work....@	7.00	" "	11.20
Hauling@	3.00	" "	4.80
Iron@	2.00	" "	3.20
Nails@	.30	" "	.50
Earth Work			25.00

\$83.90

\$33.60

2140

Sidegate.

Sta. 3718-65. Width 4 ft. Depth 6 ft. Length 24 ft. 40%

Lumber 1,448 ft....@	\$25.00	per M	\$36.20
Carpenter Work@	7.00	" "	9.80
Hauling@	3.00	" "	4.20
Iron@	2.00	" "	2.80
Nails@	.30	" "	.50
Earth Work			25.00

\$78.50

\$31.40

Sidegate.

Sta. 3734-85. Width 4 ft. Depth 3 ft. Length 24 ft. 40%

Lumber 882 ft....@	\$25.00	per M	\$22.00	
Carpenter Work...@	7.00	" "	6.30	
Hauling@	3.00	" "	2.70	
Iron@	2.00	" "	1.80	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$58.30	\$22.30

Sidegate.

Sta. 3745-87. Width 3 ft. Depth 44". Length 23 ft. 40%

Lumber 837 ft....@	\$25.00	per M	\$20.90	
Carpenter Work...@	7.00	" "	5.60	
Hauling@	3.00	" "	2.40	
Iron@	2.00	" "	1.60	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$56.00	\$22.40

2141

Sidegate.

Sta. 3746-16. Width 60". Depth 4 ft. Length 20 ft. 40%

Lumber 1,087 ft....@	\$25.00	per M	\$27.20	
Carpenter Work...@	7.00	" "	7.70	
Hauling@	3.00	" "	3.30	
Iron@	2.00	" "	2.20	
Nails@	.50	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$65.90	\$26.40

Gate.

Sta. 3.746-31. Width 70". Depth 4 ft. Length 20 ft. 40%

Lumber 1,376 ft....@	\$25.00	per M	\$34.40	
Carpenter Work...@	7.00	" "	9.80	
Hauling@	3.00	" "	4.20	
Iron@	2.00	" "	2.80	
Nails@	.30	" "	.50	
Earth Work			25.00	
			<hr/>	
			\$76.70	\$30.70

42

Stanislaus County.

Total Cost of Structures.....	\$11,915.80
Total Depreciation	6,216.00
Present Value	\$5,699.80

March 3rd, 1909.

H. H. HENDERSON,
Hydraulic Engineer.

43 In the Circuit Court of the United States for the Northern
District of California.

No. 14554.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION COMPANY,
INCORPORATED (Corporation), Complainant,

vs.

THE COUNTY OF STANISLAUS et al., Defendants.

Petition for Appeal.

to the Honorable the Circuit Court of the United States for the
Ninth Circuit, Northern District of California:

The complainant in the above entitled cause, The San Joaquin &
Kings River Canal & Irrigation Company Incorporated (a corpora-
tion), conceiving itself aggrieved by the final decree pronounced in
said cause, in and by which said decree it was ordered, adjudged and
decreed that said complainant's bill of complaint be dismissed and
that defendants recover from complainant their costs, desires to ap-
peal to the Supreme Court of the United States from said decree, and
respectfully petitions this court for an order allowing the said com-
plainant to prosecute such appeal to the Supreme Court of the United
States; and that the said Court also make an order fixing the amount
of security which said complainant shall furnish upon said appeal,
and that a certified transcript of the record and proceedings herein
be forthwith transmitted, duly authenticated, to the Supreme
Court of the United States.

44

GARRET W. McENERNEY,
FRANK H. SHORT,
EDWARD F. TREADWELL,
Solicitors for Complainant.

(Endorsed:) Filed Dec. 30, 1911, Southard Hoffman, Clerk, By
J. B. Maling, Deputy Clerk.

2145 In the Circuit Court of the United States for the Northern District of California.

No. 14554.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION COMPANY,
Incorporated (a Corporation), Complainant,

VS.

THE COUNTY OF STANISLAUS et al., Defendants.

Assignment of Errors.

Comes now the complainant in the above entitled cause and files the following assignment of errors upon which it will rely upon its appeal from the final decree herein dismissing said suit.

The Court erred:

I.

In dismissing said suit and entering a final decree therein in favor of said defendants and against complainant for their costs.

II.

In not making and entering a decree in favor of said complainant and against said defendants adjudging and decreeing that the orders of the Boards of Supervisors of Stanislaus, Merced and Fresno Counties deprive, and that each of them deprive, the complainant of its property without due process of law and without just compensation, and perpetually enjoining and restraining the defendants from publishing, enforcing or attempting to enforce said orders or either of them.

2146

III.

In holding and deciding that complainant's income under said orders of said Boards of Supervisors is in excess of six per cent. on the value of complainant's property used and useful in supplying the inhabitants of the Counties of Stanislaus, Merced and Fresno with water.

IV.

In overruling complainant's exceptions to the report of the master made and filed therein.

V.

In finding that the cost of reproduction of the earthwork excavation in the canals of the complainant is the sum of Four hundred and twenty-nine thousand four hundred and ninety-five dollars and twenty-eight cents (\$429,495.28), for the reason that said finding is unsupported by the evidence, and the evidence shows that the cost of reproducing the same is the sum of Five hundred and seventy-five thousand, seven hundred and thirty dollars and ninety-five cents (\$575,730.95).

VI.

In finding that the present value of the earthwork excavation in the said canals is the sum of Four hundred and twenty-nine thousand four hundred and ninety-five dollars and twenty-eight cents (\$429,495.28), for the reason that said finding is unsupported by the evidence, and the evidence shows that the present value of the said earthwork excavation is the sum of Seven hundred and five thousand and ninety-five dollars and ninety-five cents (\$705,095.95), and also for the reason that the court erred in not finding that the said earthwork excavation had appreciated in value in the sum of One hundred and twenty-nine thousand three hundred and sixty-five dollars (\$129,365.00).

2147

VII.

In finding that the evidence is insufficient to show that the value of the said earthwork excavation has appreciated in the sum of One hundred and twenty-nine thousand three hundred and sixty-five dollars (\$129,365.00), for the reason that the said appreciation is shown by uncontradicted evidence and admitted by the witnesses of defendants.

VIII.

In finding that the cost of reproduction of the structures on the canals of complainant is the sum of Three hundred and fifteen thousand five hundred and fifteen dollars and fourteen cents (\$315,515.14), for the reason that the same is unsupported by the evidence, and the evidence shows that the cost of reproduction of said structures is the sum of Four hundred and twenty thousand six hundred and eighty-six dollars and eighty-six cents (\$420,686.86).

IX.

In finding that the amount of interest lost by complainant on its money invested during construction is the sum of Sixty-five thousand five hundred and fifty-three dollars and three cents (\$65,553.03), for the reason that the same is not supported by the evidence, and the evidence shows that the interest so lost is the sum of Eighty-three thousand and seventy-nine dollars and sixty-four cents (\$83,079.64).

X.

In finding that complainant's properties are not enhanced in value to the extent of Forty-two thousand four hundred and seventy-one dollars (\$42,471.00), the value of the fences along the right of way of said company, for the reason that said finding is not supported by the evidence, and the evidence shows that the said properties
2148 of complainant are enhanced in value in the said sum, by reason of the existence of said fences, and by reason of the said complainant owning said right of way freed of any liability or duty to erect fences along the same.

XI.

In finding that complainant is not entitled to a reasonable return upon the value of the water right owned by complainant, and found to be of the value of approximately One Million Dollars (\$1,000,000.00), for the following reasons:

(a) Because the evidence shows that the said water right is of the value of more than Seven hundred and sixty thousand dollars (\$760,000.00) to-wit: One Million Dollars (\$1,000,000.00).

(b) Because the evidence shows that the complainant is the owner of said water right of the value aforesaid, and is entitled to a return thereon.

(c) Because the court erred in finding that because complainant had devoted the said water right to the public use, it is not entitled to any return thereon.

XII.

In finding that Miller & Lux never granted the said complainant any water right, for the reason that the same is not supported by the evidence, and for the reason that the evidence shows that the said water right was acquired with the expressed consent of Miller & Lux, a large riparian owner on said river, and that the same could not have been acquired without such consent, and that in consideration of the said consent, the said complainant and its predecessors granted said Miller & Lux certain valuable rights.

XIII.

In finding that the predecessors in interest of complainant did not pay John Bensley the sum of One hundred and twelve thousand five hundred dollars (\$112,500.00), for water rights and rights
2149 of way which he had acquired, for the reason that the evidence is insufficient to justify said finding, and the evidence shows that the said complainant did pay the said John Bensley One hundred and twelve thousand five hundred dollars (\$112,500.00) for such rights.

XIV.

In finding that the said complainant did not pay to the said Miller & Lux a sum equivalent to One hundred and seventy-four thousand nine hundred and twenty-nine dollars and sixty-seven cents (\$174,929.67) by way of reduced rates for water in consideration of the right of way and water right granted by that company to the predecessors in interest of complainant, for the reason that the evidence is insufficient to justify such finding, and the evidence shows that the complainant and its predecessors have paid to the said Miller & Lux a sum equivalent to One hundred and seventy-four thousand nine hundred and twenty-nine dollars and sixty-seven cents (\$174,929.67) in consideration of the rights so granted.

XV.

In finding that the complainant and its predecessors have not paid to the said Miller & Lux a sum equivalent to Ten Thousand dollars

(\$10,000) a year, being the value of the waste water delivered to the said Miller & Lux under the terms of the contracts between the said Miller & Lux and the predecessors in interest of complainant, which sum if capitalized at six per cent. would amount to the sum of One hundred and sixty-six thousand six hundred and sixty-six dollars (\$166,666.00), for the reason that the evidence is insufficient to support the said finding, and the evidence shows that complainant and its predecessors have paid to the said Miller & Lux the sum aforesaid.

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XVI.

In finding that the complainant and its predecessors in interest have not paid the sum of Four hundred and fifty-three thousand and ninety-five dollars and sixty-cents (\$453,095.60) for a part of the water rights and rights of way obtained and owned by complainant, for the reason that the evidence is insufficient to justify such finding, and the evidence shows that the complainant has paid the sum aforesaid.

XVII.

In refusing to allow complainant any return upon the value of its water right for the reason that the said Court has charged complainant with all of the sums paid by it in consideration of the said water right, and has allowed said complainant nothing for the water right acquired in exchange therefor.

XVIII.

In finding that it does not appear in the testimony what rights to water Miller & Lux owned at the time of the commencement of this enterprise, for the reason that the evidence shows that they were riparian owners upon the river, and as such riparian owners entitled to the unobstructed flow of all the waters of said river.

XIX.

In finding that the complainant's predecessor acquired its water rights by appropriation, for the reason that the evidence shows that the said right could be acquired only by prescription, or by grant from said riparian owners.

XX.

In finding that the complainant should have received from Miller & Lux the sum of Fourteen thousand five hundred and thirteen dollars and fifty-three cents (\$14,513.53), for the carriage of certain water for Miller & Lux, for the reason that the evidence is
2151 insufficient to justify said finding, and the evidence shows that the complainant did not own said water, and that the reasonable carriage charge therefor was the sum of One thousand one hundred and sixty-three dollars and ninety-seven cents (\$1,163.97).

XXI.

In finding that the said complainant should have received and should be charged with the sum of Ten thousand dollars (\$10,000.00) per annum, being the value of the waste waters delivered to Miller & Lux, for the reason that the evidence is insufficient to justify said finding, and the evidence shows that the complainant never did receive and was never entitled to receive the said sum.

XXII.

In finding that Miller & Lux were not entitled, under the terms of its contracts with complainants, to the said waste water, for the reason that said finding is not supported by the evidence, and the evidence shows that the said Miller & Lux is entitled thereto.

XXIII.

In finding that the purchasing of water by Miller & Lux for the irrigation of uncultivated land was inconsistent with its claim to the waters wasted by complainant, for the reason that the evidence is insufficient to justify the said finding.

XXIV.

In finding that the said complainant could have diverted three hundred and fifty (350) cubic feet of water into its Outside canal without the consent of Miller & Lux, for the reason that the evidence is insufficient to support said finding, and the evidence shows that the said complainant could not divert any water from said river without the consent of Miller & Lux.

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XXV.

In finding that Miller & Lux by purchasing said water for the irrigation of uncultivated lands, waived or abandoned any claim it had to the waste waters from said canal.

XXVI.

In finding that more water was wasted from said canal than was necessary, and in finding that water was turned into the swamps other than water necessarily wasted, for the reason that the evidence is not sufficient to support said finding, and the evidence shows that there was no more waste than necessary.

XXVII.

In finding that complainant could have irrigated the fourteen thousand one hundred and eleven and sixty-five one-hundredths (14,111.65) acres of land irrigated with the water carried for Miller & Lux with the seven hundred and sixty (760) feet of water owned by complainant, for the reason that the evidence is insufficient to justify said finding.

XXVIII.

In finding that complainant will receive 7.704 per cent. income on the present value of its properties, for the reason that the said finding is not supported by the evidence, and the evidence shows that complainant will not receive even two (2) per cent. on the value of its properties.

XXIX.

In finding that the net income which will be received by the complainant under said rates will be a just and reasonable compensation to the complainant for the furnishing of said water, for the reason that the evidence shows that the complainant will receive no just nor reasonable compensation from the said rates.

XXX.

In finding that there is no evidence sufficient to determine the value of the franchise of complainant for the reason that the same is unsupported by the evidence, and the evidence shows that complainant's franchise is of the value of at least Seven hundred and sixty thousand dollars (\$760,000.00).

XXXI.

In finding that the total value of complainant's property is the sum of Eight hundred and ninety-six thousand eight hundred and twenty-nine dollars and fifty-five cents (\$896,829.55), for the reason that the evidence is insufficient to justify said finding, and the evidence shows that the value of complainant's property exceeds the sum of Two Million Dollars (\$2,000,000.00).

XXXII.

In finding that the total receipts of the said complainant under the rates fixed by said ordinances is the sum of One hundred and thirty-six thousand, six hundred and ninety-seven dollars and thirty-five cents (\$136,697.35), for the reason that the evidence is insufficient to justify said finding, and the evidence shows that the total receipts of complainant amount to the sum of One hundred and thirteen thousand three hundred and forty-seven dollars and seventy-nine cents (\$113,347.79).

XXXIII.

In finding that the total expense of maintenance of said complainant is the sum of Sixty-seven thousand one hundred and fourteen dollars and eighty-four cents (\$67,114.84), for the reason that the same is unsupported by the evidence, and the evidence shows that the said expense of maintenance of complainant is the sum of Ninety-four thousand three hundred and twenty-three dollars and thirty-eight cents (\$94,332.38) per annum.

1540 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. *vs.*

2154 Wherefore complainant prays that the said decree be reversed.

GARRET W. McENERNEY,
FRANK H. SHORT,
EDWARD F. TREADWELL,
Solicitors for Complainant.

(Endorsed:) Filed Dec. 30, 1911, Southard Hoffman, Clerk. By W. B. Maling, Deputy Clerk.

2155 At a stated term, to-wit: July term 1911, of the Circuit Court of the United States, Ninth Circuit, Northern District of California, held at the courtroom in the City and County of San Francisco, on the 30th day of December, 1911;
Present, Hon. W. W. Morrow, Circuit Judge.

In the Circuit Court of the United States for the Northern District of California.

No. 14554.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION COMPANY,
INCORPORATED (a Corporation), Complainant,
vs.
THE COUNTY OF STANISLAUS et al., Defendants.

Order Allowing Appeal.

On reading and filing the petition of The San Joaquin & Kings River Canal & Irrigation Company Incorporated (a corporation). Complainant herein, for an order allowing an appeal to the Supreme Court of the United States from the final decree herein, and the filing herein of the assignment of errors relied upon, and an undertaking on appeal, duly approved by the court, it is Ordered that an appeal to the Supreme Court of the United States from the final decree hereinabove referred to be, and the same is hereby allowed, and that a transcript of the record be forthwith transmitted to the Supreme Court of the United States.

Done in open court this 30 day of December, 1911.

WM. W. MORROW,
Circuit Judge.

(Endorsed:) Filed Dec. 30, 1911. Southard Hoffman, Clerk.
By W. B. Maling, Deputy Clerk.

2156 In the Circuit Court of the United States for the Northern District of California.

No. 14554.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION COMPANY,
INCORPORATED (a Corporation), Complainant,

vs.

COUNTY OF STANISLAUS et al., Defendants.

Bond on Appeal.

Know all men by these presents: That we, The San Joaquin & Kings River Canal & Irrigation Company Incorporated (a corporation), as principal, and C. Z. Merritt and E. G. Rodolph, as sureties, are held and firmly bound unto the County of Stanislaus, in the State of California, The Board of Supervisors of said County of Stanislaus, Abram E. Clary, Moses A. Lewis, James W. Davison, John J. McMahon, and John Dunn, the members of and constituting said Board of Supervisors of said County of Stanislaus; the County of Merced, in the State of California, the Board of Supervisors of said County of Merced, James R. Baxter, Henry Nelson, Charles H. Deane, George Whitworth, and James W. Haley, the members of and constituting said Board of Supervisors of said County of Merced; and the County of Fresno, in the State of California, the Board of Supervisors of said County of Fresno, and George W. Beall, Thomas Martin, James B. Johnson, William D. Mitchell, and Chris Jorgensen, the members of and constituting said Board of Supervisors of said County of Fresno, Defendants, in the sum of One Thousand (\$1000.) Dollars, to be paid to said defendants, their successors and assigns, to which payment, well and truly
2157 to be made, we bind ourselves, our heirs, executors and administrators, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 30th day of December, 1911.

Whereas The San Joaquin & Kings River Canal & Irrigation Company Incorporated (a corporation) is about to petition the Circuit Court of the United States, Ninth Circuit, Northern District of California, to grant an appeal from a certain final decree entered by said court in an action therein pending entitled The San Joaquin & Kings River Canal & Irrigation Company Incorporated (a corporation), Complainant, vs. The County of Stanislaus, et al., Defendants, and numbered 14554;

Now, the condition of the above obligation is such that if the said The San Joaquin & Kings River Canal & Irrigation Company Incorporated shall prosecute the said appeal to effect, and if it fails to make its plea good shall answer all costs which may be awarded

1542 THE SAN JOAQUIN AND KINGS RIVER, ETC., CO. VS.

against it, then the obligation to be void, otherwise it shall remain in full force and effect.

THE SAN JOAQUIN & KINGS RIVER
CANAL & IRRIGATION COMPANY,
INCORPORATED,

By J. LEROY NICKEL, *Vice-President.*

[SEAL.]

By C. Z. MERRITT, *Secretary.*

C. Z. MERRITT,
E. G. RODOLPH.

[SEAL.]
[SEAL.]

2158 UNITED STATES OF AMERICA,
State of California,
City and County of San Francisco, ss:

C. Z. Merritt and E. G. Rodolph, being severally duly sworn, each for himself deposes and says: that he is a resident and householder within the Northern District of California, and is worth the sum specified in the foregoing bond over and above all his just debts and liabilities, exclusive of property exempt from execution.

C. Z. MERRITT.
E. G. RODOLPH.

Subscribed and sworn to before me this 30th day of December, 1911.

[SEAL.]

M. V. COLLINS,
*Notary Public in and for the City and
County of San Francisco, State of
California.*

The foregoing bond is hereby approved this 30th day of December, 1911.

WM. W. MORROW,
Circuit Judge.

(Endorsed:) Filed Dec. 30, 1911. Southard Hoffman, Clerk. By W. B. Maling, Deputy Clerk.

2159 In the District Court of the United States in and for the
Northern District of California, Second Division.

No. 14554.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION COMPANY,
INCORPORATED (a Corporation), Complainant,
vs.

THE COUNTY OF STANISLAUS et al., Defendants.

Clerk's Certificate to Record on Appeal.

I, Jas. P. Brown, Clerk of the District Court of the United States of America, in and for the Northern District of California, do hereby

certify the foregoing twenty-one hundred and fifty-eight pages, numbered from 1 to 2158, inclusive; to be a full, true and correct copy of the record and proceedings in the above-entitled cause, in accordance with the stipulation of the parties, dated February 6th, 1912, and that the same constitute the record on appeal to the Supreme Court of the United States.

I further certify that the cost of the foregoing transcript of record on appeal is \$1347.60, that said amount was paid by the complainant, and that the original citation issued in said cause is hereto annexed.

In testimony Whereof, I have hereunto set my hand and affixed the Seal of said District Court, this 3d day of July A. D. 1912.

[Seal of the U. S. District Court, Northern
Dist. of California.]

JAS. P. BROWN,
*Clerk of United States District Court,
Northern District of California,*
By W. B. MALING,
Deputy Clerk.

2160 UNITED STATES OF AMERICA, *ss:*

To the County of Stanislaus, in the State of California; The Board of Supervisors of said County of Stanislaus, Abram E. Clary, Moses A. Lewis, James W. Davison, John J. McMahon, and John Dunn, the Members of and Constituting said Board of Supervisors of said County of Stanislaus; the County of Merced, in the State of California, the Board of Supervisors of said County of Merced, James R. Baxter, Henry Nelson, Charles H. Deane, George H. Whitworth, and James W. Haley, the Members of and Constituting said Board of Supervisors of said County of Merced; and The County of Fresno, in the State of California, The Board of Supervisors of said County of Fresno, and George W. Beall, Thomas Martin, James B. Johnson, William D. Mitchell, and Chris Jorgensen, the Members of and Constituting said Board of Supervisors of said County of Fresno, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be held at the City of Washington, in the District of Columbia, on the 29th day of February A. D. 1912 pursuant to an Order Allowing Appeal, wherein The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, a corporation, is Appellant and you are Appellees, to show cause, if any there be, why the Final Decree in the said Order Allowing Appeal mentioned, should not be corrected, and speedy justice should not be done to the parties in that behalf.

Witness the Honorable William W. Morrow, United States Circuit Judge, Ninth Judicial Circuit, this 30th day of December, A. D. 1911, and of the Independence of the United States, the one hundred and thirty-six.

WM. W. MORROW,
United States Circuit Judge.

2161 Service of within Citation, by copy, admitted this 10th day of January A. D. 1912.

L. J. MADDUX,
H. S. SHAFFER,
DENVER S. CHURCH,
M. F. McCORMICK,
J. P. LANGHORNE,
Solicitors for Defendants.

[Endorsed:] 14554. In the Supreme Court of the United States The San Joaquin & Kings River Canal & Irrigation Company Incorporated (a corporation), Complainant, vs. County of Stanislaus, et al., Defendants. Citation. Filed Jan. 22, 1912. Jas. P. Brown, Clerk, By J. A. Schaertzer, Deputy Clerk.

2162 In the Supreme Court of the United States.

No. —.

THE SAN JOAQUIN & KINGS RIVER CANAL & IRRIGATION COMPANY,
INCORPORATED (a Corporation). Appellant,

vs.

COUNTY OF STANISLAUS et al., Appellees.

Stipulation as to Record on Appeal.

It is hereby stipulated and agreed by and between the appellant and appellees in the above entitled suit that the transcript of record on appeal in said suit shall consist of the portions of the record hereinafter designated, and that the clerk of the lower court shall transmit to the Supreme Court of the United States as and for the record on appeal in said suit the following:

1. Pleadings in said suit.
2. Evidence for complainant.

(Excepting, however, complainant's Exhibit 19, being a contract between Miller & Lux, et al., and John S. Eastwood, et al., and complainant's exhibit 22, being a supplemental contract entered into between Miller & Lux, et al., and John S. Eastwood, et al. The said agreement and supplemental agreement were made between Miller & Lux and other riparian owners on the San Joaquin river with John S. Eastwood and others prescribing the terms upon which Eastwood and others might reservoir water of the San Joaquin river in the Sierra Nevada Mountains for the purpose of producing
2163 power and providing for the reservoiring of said water during high stages of said river and releasing of said water during the low stages thereof.

Also excepting complainant's Exhibit 5, being price list of lumber.)

3. Evidence for defendants.

(Excepting, however, defendants' Exhibit "I", being map of irrigated lands; also the following parts of defendants' Exhibit "N",

viz: Commencing with the words "Lumber bill, stop gates" in the report of Charles E. Sloan and Burton Smith, up to the word "Recapitulation" in said report; also the table headed "Prices" being the last page of said report.)

4. Report of master.
5. Complainant's exceptions to master's report.
6. Opinion of the court.
7. Order confirming master's report and decree.
8. Petition for appeal.
9. Assignment of errors.
10. Order allowing appeal.
11. Bond on appeal.
12. Citation on appeal.

Dated: February 6th 1912.

J. P. LANGHORNE,
L. J. MADDUX,
DENVER S. CHURCH,
M. F. McCORMICK,
H. S. SHAFFER,

Solicitors for Appellees.

GARRET M. McENERNEY,
FRANK H. SHORT,
EDWARD F. TREADWELL,

Solicitors for Complainant.

2164 [Endorsed:] No. —. In the Supreme Court of the United States. The San Joaquin & Kings River Canal & Irrigation Company Incorporated (a corporation) Appellant, vs. County of Stanislaus, et al., Appellees. Stipulation as to Record on Appeal. Edward F. Treadwell Attorney-at-Law, 1302 Merchants Exchange Building, San Francisco, California.

Endorsed on cover: File No. 23,297. N. California C. C. U. S. Term No. 722. The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, appellant, vs. The County of Stanislaus, in the State of California, et al. Filed July 15th, 1912. File No. 23,297.